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# RIFLE FIRE

AND THE

# HIGHER INDIVIDUAL TRAINING OF THE SOLDIER.

BY

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"CAVALRY TACTICS OF TO-DAY."

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1906.

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то

MY FATHER.

Dai 27.8.60
A.M.

#### BY THE SAME AUTHOR.

# CAVALRY TACTICS OF TO-DAY.

- "The book is full of interest to the soldier, and instructive also to the layman who would read of the personal experiences on service of a Commander of Irregular Horse."—Indian Daily News.
- "The notes bespeak a thorough mastery of all that appertains to the handling of cavalry and the equipment of horse and man, and may emphatically be recommended for careful study by all cavalry and yeomanry officers."—The Athenaum.
- "The information contained is particularly useful to Australian and New Zealand mounted riflemen, and if an officer wishes to keep himself abreast of the times in the matter of cavalry work, he cannot do better than read it attentively."——New Zealand Press.
- "Many books, pamphlets, reports of committees, and of commanders have been published concerning this war, but we have seen none that will be of more value to the non-commissioned officers, to the lieutenants, and to troop, squadron and regimental commanders of cavalry than this small handbook of condensed experience and practical information."—

  Journal of the Military Service Institution of the United States.
- "His book, indeed, is written with the utmost good taste, and is worthy to rank amongst the best literature of his profession."——Lyttleton Times, New Zealand.
- "The volume teems with sound teaching and suggestions."
  —Bombay Gazette.
- "One cannot but admire the courage of a military writer who fears not to ride rough shod over accepted principles and time-honoured tradition and to state unflinchingly what are his firm convictions. We find much in this plain statement of a plain soldier to admire."—Madras Mail.

#### FIVE RUPEES.

THACKER & CO., BOMBAY AND LONDON.

# PREFACE.

FOR some years past our manuals of instruction, issued for the guidance of squadron, company, and regiinsisted on the supreme commanders, have importance of a high standard of individual instruction as the basis of our training. The Infantry Training says, "Particular attention must be paid to the individual instruction of the soldier, and to the improvement of his capacity to think and act for himself. The basis of the whole system of training is careful individual instruction, and gradual progression from the simple to the more The Combined Training says, "The soldier must be so instructed that he may be able to comprehend the meaning and object of every movement he is directed to carry out. His individual intelligence will thus be called into play, and he will gradually be induced to take" a personal interest in his own fighting efficiency.? The latest British Musketry Regulations say," No soldier can take part in the field practices with profit unless he is a fair shot at known ranges, is able to take cover rapidly, adjust his position to the ground, use his eyes, judge distance, and act intelligently on his own initiative and in co-operation with his comrades."

These brief extracts convey, in unmistakable terms, the wishes of those responsible for the training of our Army as to the direction in which our best efforts should be directed. From close observation and frequent inquiry, however, I am inclined to think that the individual training of the soldier, both in the British and Indian Army, is not receiving the attention its immense

importance demands. In fact, I am impelled to sav that it is almost universally neglected, and, with the exception of a few scouts in each regiment, the British and Indian soldier of to-day is but little better than he was ten years ago. The doubt as to what this individual training should embrace, how the instruction should be imparted, the apparently inadequate time available, the numbers who have to be trained, the great gulf that separates the intelligent officer from the presumably ignorant soldier, and the imagined immensity of the task have, each and all, contributed somewhat to its being left severely alone. The principle inculcated, however, is so sound and the object in view so essential to the future efficiency of our Army, that we can no longer afford to studiously neglect it. We must brace ourselves up, grapple with the difficulties, overcome the obstacles, and set out fully determined to loyally and faithfully carry out what the Regulations demand.

In the short service conscript armies of the Continent the time at the disposal of the officers is so short and the subjects required to be taught so diverse, that the soldier, as an individual, receives little or no attention, and the German, French, and Russian soldier still remains an unthinking, irresponsible nonentity. Their companies, squadrons, and battalions are trained, but the short period of training does not admit of the man being trained to think and act for himself or to take any interest whatever in his own efficiency as a fighting man. With us, however, it is different. The soldier in the British service is with the Colours for at least 7 years and sometimes for 12 and even 21 years, and in the Native Army he spends half his life in the ranks. I cannot, therefore, agree with those who urge that the task is so great, the time so short, and the subject so difficult that it is better left alone.

In the third year of their service when our men are just getting into their stride, the continental soldiers are sent back to civil life even if they cannot shoot any better than a company of Australian blacks who have never seen a rifle. We have too long been fettered and guided by continental opinion in military matters. Their standards of efficiency have too long been our standards, and, in insisting on the training of the individual soldier to a higher standard of efficiency, those responsible for the efficiency of our Army have taken a decidedly progressive step which we should loyally and zealously support. After the third year of their service each year spent in the training of our men should mark a distinct gain in tactical superiority over that which is possible in foreign armies, until at the end of five or six years' service, in tactical knowledge, in field-craft, in judging distance, in shooting, in eye for ground, in power of observation, in intrenching, and in fact in everything that is necessary to ensure a high standard of individual fighting efficiency, the long service voluntary soldier of the British and Indian Army should have no equal in the world. When the guns on Talana announced the beginning of one of the most bitterly contested conflicts of modern times, it was found, to the astonishment of the civilized world, that in almost every one of the qualities mentioned above, the long service British soldier was inferior to the untrained farmer of South African Republic. Is he any better to-day?

With his incomparable company and squadron commanders, his varied experiences of climate and terrain, his long years of service, his profound confidence in the integrity and honesty of purpose of his "gentleman" officer, his innate love for law and order, his indomitable pluck, his pride in his regiment, and his love for his country,

the British soldier is capable of being made the finest soldier the world has ever seen.

It is to assist his company and squadron commanders towards the attainment of this ideal that the following chapters have been written.

With this object in view I have set up the following standard of efficiency for their guidance:—

- (1) The soldier's intelligence must be developed at every stage of his career.
- (2) His education in the regimental school must receive constant and sympathetic attention.
- (3) He must be forced to think and act for himself.
- (4) He must be able and encouraged to use his wits.
- (5) He must be trained and sympathetically encouraged to be self-reliant and resourceful.
- (6) He must be more observant.
- (7) He must be able to realise the value of ground in his vicinity and know how to utilise it so as to minimise the effect of the enemy's fire and at the same time secure the best effect from his own.
- (8) He must be able to extemporise cover, intrench himself against frontal, cross, and enfilade fire, and provide himself with head cover which will afford him protection from rifle fire and shrapnel.
- (9) He must be capable of estimating the range, of selecting his own target, of husbanding his ammunition, of noting the effect of his shots, and of directing his fire intelligently.
- (10) He must be able, in the absence of his leader, or when control is no longer possible, to go on fighting, maintaining his ground or pushing forward to other points of vantage whence he can, with fire, assist his comrades to the right

- (11) His patriotic feelings must be aroused and he must be trained to a high sense of national honour.
- (12) He must be imbued with a profound confidence in the ability of his officers to instruct in peace and to lead in war.
- (13) He must participate in that mutual confidence which arises from a knowledge that each man in the Army is trained to the same high standard of efficiency as himself, and is actuated by the same exalted enthusiasm and ideals.
- (14) His discipline must be on a higher plane than has hitherto been considered necessary, advisable, or even possible.

This, then, is what I consider to be essential, and I feel confident that, with method, system, and intelligently directed effort, its attainment is within the reach of all. And it is only right that our efforts should be directed towards its attainment. When once the soldier in the ranks is able to comply with the conditions mentioned above it will be the simplest matter in the world to obtain an exceedingly high standard of efficiency in the squad, company, and battalion exercises. But the present so-called system of training the companies and battalions and neglecting the individual is as heartbreaking as it is unprofitable. It is like taking fifteen men and endeavouring to teach them football as a body before the individuals can either tackle, fend, or sprint.

Before the squadron or company commander can hope to achieve any real tangible success in the training of the individual he must make up his mind, once and for all, to pay no heed to those who are so fond of urging that neither the British soldier nor his non-commissioned officer is capable of displaying any individuality what-

ever. I hear on all sides that the men in the ranks have neither commonsense nor intelligence, that they have no idea of locality, and that they cannot be trusted out of the sight of their Captain or Colonel. This, unfortunately, is the opinion of a great number of the officers in the Army and it is largely responsible for the past and present standard of mediocrity. It produced the inefficient soldier of 1879-80, the helpless fighting man at Majuba Hill, the mechanical rifleman in Tirah, and the tactically incompetent soldier at Spion Kop. To go on working, year in and year out, on the assumption that the men cannot be trusted to find their way back to a camp containing a whole division or an army corps, which a child twelve years of age could do if left to himself, is to merely encourage the condition of general helplessness that was so forcibly brought to light six years ago.

The assumption is a most pernicious one and I earnestly appeal to every officer in the Army to discard it forthwith. Let us start from to-day firmly determined that the standard of mediocrity existing in the short service conscript armies of the continent is not nearly good enough for us; that the voluntary and long service soldier of our British and Indian Armies must and shall be made the most perfect fighting-man in the world; that he must be forced to use his commonsense; that he must be able to find his way about country; that he must be made to use his eyes, to judge distance, and to shoot intelligently, and I have not a shadow of doubt that the results will exceed our most sanguine expectations.

General Fukushima, of the Japanese General Staff, who has closely studied our Indian Army, in a conversation with General Sir Ian Hamilton hinted that, "Long service in India might sometimes tend to make officers narrow and self-sufficient, and apt to imagine their army

was perfect, than which, as everyone knows, there is no more dangerous frame of mind." These are ominous words and full of significance. Let us hope that, on some future occasion, they will not prove to have been prophetic.

In the general scope of the work I have dealt with every subject that I consider the soldier should have a thorough grounding in, and, conscious as I am of my own deficiencies, I have endeavoured to show how each subject should be treated. I have interpolated three chapters, namely, III, IV, and V, which deal with one or two subjects of general interest, in which the necessity for a judicious devolution of authority and the urgent need of training the junior leaders to a higher sense of duty and responsibility are perhaps the most important.

Rifle shooting takes the place of honour throughout the work, and I consider its supreme importance nowadays justifies the apparent neglect of ordinary drill matters. Dressed in khaki, with a background that assimilates with the colour of his uniform, realising the immense importance of invisibility, with a keen and observant eye, a good judge of distance, an unerring shot and imbued with a profound confidence in his ability to disable any adversary who comes within 800 yards of his splendid weapon, the intelligently trained soldier behind the rifle, be he infantryman or cavalryman, is the most potent factor in modern war.

Should my efforts, however imperfect they may be, meet with the approval of my brother-officers, I may, on some future occasion, ask them to accompany me through a course of exercises in fire tactical training with their tompanies, squadrons, and regiments.

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#### CHAPTER I.

"No nation ever yet attained to durable greatness but by institutions in harmony with its spirit." So wrote Montesquieu at the dawn of the eighteenth century, at a time when the accepted opinion among men, the doctrine of philosophers and after them of statesmen and politicians was, that institutions were everything, and character nothing; that men were formed by the system of government under which they lived; and that by extending to all the same institutions and civil privileges it was possible to produce in all the same character; and to ensure the same social progress. Montesquieu, however, maintained that it is not the institutions which form men, but men which form the institutions; and that no calamities are so long continued and irremediable as those arising from the establishment in one country of the institutions and methods of administration suited to another.

He was a great military critic, a keen observer of men, an inimitable judge of human character, and I believe that the persistent neglect of the great principles he advocated has brought upon mankind its greatest misfortunes. That our military institutions should be in sympathy with the characteristics of our race, and not, as they frequently have been, borrowed from others, is in my opinion indisputable, and I venture to hope that the reflections contained and opinions expressed herein may serve to arouse the interest and arrest the attention of those responsible for the efficiency of our army, and the future happiness of our people.

The Spartans who stand in the front rank of military nations had their own military institutions. The outline of their system of fighting was distinctly original.

The Roman system of conducting war was distinctly national The Roman soldier was invincible in the days of the republic, in the idea that he was a Roman. auxiliaries of ancient Rome, as they do of modern Britain, formed a considerable part in point of numbers of its military forces, but the strength of the legions was to be found in the It was that indomitable body of men, ever Roman citizens. flowing out yet ever full, animated with fiery passions but directed by consummate prudence, panting for conquest or spoil, but patient of all hardships by which they were to be attained, which constituted the strength of the Roman arms. when the national interest in the individual ceased, and the national character under the influence of a combination of degrading circumstances began to decline, that Rome, the proud mistress of the then known world, began to totter to her fall.

Prior to 1745 the Highlanders of Scotland knew less of arts and sciences than perhaps any people in Europe. They possessed largely the instinctive military sagacity of the semi-barbarous stage of society, but they had none of the common military science of civilized Europeans. Badly provided with arms, and relying on a system of fighting which was the natural outcome of their surroundings and their social condition, and ignoring the tactics of France and Germany, they defeated the regular and experienced troops of the Crown at Prestonpans and Falkirk.

The moral effect of Prestonpans, Falkirk, and Clifton Moor was tremendous. The veteran soldiers of England who had fought with credit and renown on the battle fields of Flanders were terror-stricken and amazed by the novel, and, to the unthinking minds of their leaders, unreasonable methods of fighting adopted by the skilful and daring Highlanders. It was only when Cumberland, overcoming all opposition, insisted on a modification of the hitherto accepted principles of tactics as inculcated by foreign officers, that the chivalrous clans were compelled to admit the futility of further resistance. But Cumberland's lesson was soon forgotten, and thirty years

after we find our generals hopelessly attempting the conquest of America with the stereotyped methods of the continent. Not only in the backwoods of Carolina and Virginia, but on the borders of the great lakes of Canada, in the fever-stricken islands of the Caribbean Sea and the Gulf of Mexico, and on the plateau of Mysore, the British Army struggled in vain to free itself from a system which curbed its spirit, stifled the individual valour of its men, and militated so much against its success. The methods of Flanders were as inapplicable to the swamps of Carolina and the forests of Virginia as they were to the bushland of New Zealand; and as impossible against the ubiquitous Mysorean horse as the German systems of recent times proved to be against the farmers of the South African Republic.

When Peter the Great destroyed the Prætorian Guards of Moscow, he set himself zealously and assiduously to build up the military fabric of the Empire in strict accordance with its national and religious feelings, and the victory of Pultowa was the immediate result.

The records of the French revolution show in no uncertain manner, that the national army, enrolling in its ranks all that was intelligent in the French nation, and adopting a system of fighting founded on an intimate knowledge of the real nature of things, and eminently suited to the characteristics of its soldiers, achieved successes unparalleled in the pages of history. If we turn to La Vendee in 1793 we find the rude but loyal peasantry of that quarter adopting a method of fighting admirably adapted both to the spirit by which they were animated, and to the country in which the conflict against the republican forces was conducted, and achieving thereby a measure of success that brought them within striking distance of Paris, and threatened to break in the very beginning that awful revolution which afterwards deluged Europe with blood.

We know that prior to the outbreak of the war of Secession in 1861, whatever regular military force the United States possessed, had been trained entirely in accordance with the

French drill and tactical regulations. We know also that before many months had elapsed, these regulations which those responsible for the training and efficiency of the army had so servilely copied from the productions of foreign staffs, were thrown to the winds, and a system of fighting, especially in the cavalry service, was adopted, suitable alike to the peculiarities of the American soldiers, and to the country in which the war was conducted. But it was not until Shiloh's sanguinary battle had been fought, the farmsteads and smiling valleys of the Shenandoah devastated, and the green fields and wooded slopes of Virginia reddened with the blood of thousands of America's noblest and best, that their commanders realized that to blindly copy the institutions and systems of another State, is fraught with the direst danger.

The extraordinary vitality of the Turkish Empire has excited the interest and arrested the attention of the ablest military and political authorities of our time. Within the memory of most of us, the Russians waged a desperate contest with the Turks; they brought nearly a quarter of a million men into the field, but after months of fighting they made no sensible progress in the reduction of the bulwarks of Islamism. Two hundred thousand Mussulmans assembled round the green standard of Mahomet; for the fourth time during the century the Danube ran red with blood, but the hostile armies still struggled in doubtful and desperate strife on its banks; and on the glacis of Plevna, the Muscovites sustained bloodier defeats than they had ever received from the genius of When we recall the inefficiency of the Turkish Napoleon. commanders, the general corruption that pervades the country, the lack of transport services, the inadequate commissariat supplies, the primitive hospital arrangements, the starving, ill-clad, and shoeless Turkish soldier, we are moved to admiration of him who has participated in such mighty conflicts, and resisted so manfully the fearful torrents of Northern invasion. His strong spirit of nationality with its accompanying contempt for all other nations, which has enabled him to fight in his

own peculiar way and with methods suited to his spirit, has been throughout all its vicissitudes the mainstay of the Turkish army. It is unquestionable that one of the greatest blows to the Turkish military system was the disbandment of the Janissaries, the national troops, and the enrolment in their stead of Turkish cavalry mounted and trained in Euro-The scimitar, the national weapon, the turban, pean style. the national dress were laid aside in the army, and instead of the fierce and valiant Janissaries wielding their dreaded weapons, there were for a time to be found listless youths wearing European caps and tight jackets, and looked upon as heretics by all true believers. It is doubtless possible to give to Asiatic troops the discipline and efficiency of Europeans, and that is what Russia, Egypt, taken place in India, and Japan. Whether it is possible for Asiatic cavalry to ride down the more determined, the more resolute, and the heavier horsed dragoons and cuirassiers of the West, or to produce an Asiatic force wielding the straight-pointing sword with the same confidence and effect as they have for centuries displayed with their national weapon, the tulwar, or whether it is feasible to unite with their discipline and training the institutions and habits of a different race and quarter of the globe, and whether it is possible to erect the fabric of European freedom on the basis of Asiatic servitude, are questions yet unsolved but regarding which it can only be said that if they do take place it will be contrary to the teaching of four thousand years of history, and the experience of nearly a hundred millions of pcople.

The recent struggle for Empire in South Africa, replete as it is with soul stirring deeds on both sides, presents at the same time a striking example of an insignificant nation with no trained military force adopting a method of fighting based on the real nature of things, and imbibed from its surroundings. Although for years Pretoria had been the hunting ground of French and German officers anxious to insinuate their ideas

of cavalry and infantry tactics into the Boer system, the Boers preferred to risk their all on a system of tactics which they knew to be in harmony with the spirit and traditions of their They conceived that their inherent and instinctive methods, suited alike to the peculiarities of their men and adapted to the country in which the combat was to be waged, were calculated to produce greater results than any borrowed The result, as unexpected as it was assystem of tactics. tounding, fully justified those redoubtable leaders, who, ignoring the tactics and training of the great military nations of Europe, allowed their men to fight in a manner which permitted of their utilising to the fullest extent their "slimness" and their mobility. Had their leaders listened to the importunities of the foreign officers who for years urged the superiority of their methods; had those responsible for the war preparations formed their mounted men into squadrons, regiments and brigades; had they spent the last four or five years prior to 1899 in practising the tactics, drill and manœuvres as carried out in Europe; had they formed their artillery into batteries and brigades and habituated them to manœuvre as such, they would have failed ignominiously.

Their mounted men formed into squadrons, regiments, and brigades would have at once surrendered all those points which were the distinguishing features of the Boer—his skill in handling the rifle, his eye for country, his dexterity in the use of cover, and his extraordinary individuality—and would have succumbed to the onslaught of the first British cavalry brigade they encountered. To the truculent and stubborn farmer of the Transvaal military training, as we understand it, was unknown; his method of fighting was simple; it was acquired from his surroundings and from his daily life. On our side there was no apparent lack of those natural qualities which have so long distinguished the British race, and our misfortunes therefore must have greatly surprised those who had laboured so assiduously to perfect a tactical system which had for its foundation the lessons of past continental wars,

and for its edifice the systems of nations quite different to us in character and temperament. In my opinion, from the first fight at Talana to the tiresome days of the guerilla warfare, the success of the Boers against the might and power of our Empire, is to be explained by the one word "originality."

The recent struggle for Empire in the Far East recalls the most momentous dramas in the history of the world. ing all the changes of time, of religion, of empire, and of dynasty, one great contest has in every age divided mankind. It is the war of Europe and Asia—the strife of the descendants of Shem with the sons of Japheth. The great struggle between France and Germany, the mighty conflict which for four years convulsed the United States, both sink into insignificance when compared with the latest, or any struggle between Europe and Asia. This never-ending warfare has alternately pierced each continent to the heart; it brought the arms of Alexander to the Indus, and those of England twice to Cabul; it conducted the Saracens to the fair land of France, and Attila with his fiery Huns to the field of Chalons. In one age it induced the disasters of Julian, in another the Moscow retreat; it led to the fall of Rome and the capture of Constantinople; it precipitated Europe upon Asia during the Crusades, and Asia upon Europe during the fervour of Mahomedan conquest. Cæsar was preparing an expedition against the Parthians when he was assassinated; Napoleon missed his destiny before the walls of Acre. It began with the siege of Troy, but it will not end with that of Port Arthur. The Goths, who overturned the Roman Empire, appeared first as suppliants on the Lower Danube, and they were themselves impelled by a human wave which rose on the frontiers of China. It is the East not the North which in every age has threatened Europe; it is in the table-land of Tartary, almost within sound of the guns at Mukden, that the greatest conquerors of mankind have been On all sides we hear it proclaimed that the Japanese owe their extraordinary success to the foreign military systems adopted by them. Nothing could be more misleading. The Japanese, like the Normans who followed the standard of William the Conqueror, possess in a peculiar degree the instinctive faculty of appreciating and adopting the superior civilisations of the nations with whom they have come in contact. Whilst carefully noting the methods in use in foreign armies they have adopted only what accords with their characteristics and idiosyncrasies. Like the Romans of old they have modified to suit themselves, not servilely copied, the methods of others, and the strong impress of their national individuality is to be seen in every department of their military system.

Is it right to infer from what has been said, that a system of fighting in sympathy with our national characteristics and peculiarities, is preferable to that which is artificial and borrowed? I think so, and would therefore urge that whilst not neglecting to observe and consider the system of training enforced in foreign armies, our officers, and especially those responsible for the tactical regulations by which we are guided, should constantly exert themselves to think out, and by their originality of thought produce such systems or methods of fighting and handling of troops as are calculated to give ample scope for the exercise and utilisation of those qualities and characteristics which we know to be peculiar to our British and Colonial soldiers, and to enable us on the day of battle, to utilise to the fullest extent possible, the characteristic dash of the Scotchman, the impetuosity of the Irishman, and the dogged tenacity and steadfastness of purpose of the Englishman.

It is in the character of its inhabitants that we must look for the predominating cause of the greatness of a nation. I do not profess to be able to explain this, but the student of history cannot help noticing that there is a marked difference in the intellectual qualities and in the ruling propensities of the verious races of mankind; and that to this fact is to be ascribed the extraordinary diversities in the history and ultimate fate of nations. Instead of our system of fighting

being the result of the national temperament long and imperceptibly acting on the administration of our military affairs. it has for many years been a servile imitation of German, French, and Russian methods. The records of history in this particular proclaim in no uncertain manner that the transference to the people of one race of the institutions of another has seldom been productive of much that is good, and has generally been fraught with the direst calamities.

During the last two or three decades this imitative tendency has displayed itself in every branch of our army, and I would point out in this respect that many of the greatest successes recorded in the pages of our history were achieved by a force peculiar to England. The hosts of skilful and valiant archers raised from the English Yeomanry, which followed the fortunes of the House of Plantagenet-formidable alike from their peculiar skill and from the independent spirit of our forefathers which permeated their ranks—gave our military reputation a degree of pre-eminence which the army maintained unsullied for more than a hundred years. The troops of no other nation could produce a body of men in the least comparable to them, either in strength, discipline, or individual valour; and such was the dreadful efficacy and unprecedented skill with which they used their weapons, that the Yeomen archers of England, sweeping all before them on the continent of Europe, added Creey, Poictiers and Agincourt to our brilliant records.

"Names that to fear were never known, Bold Norfolk's Earl de Brotherton. And Oxford's famed De Vere: Ross, Montague, and Manly came, And Courtney's pride, and Percy's fame, Names known too well in Scotland's war, At Falkirk, Methyen, and Dunbar, Blazed broader yet in after years, At Cressy red, and fell Poictiers."

It was in those days of chivalry that foreign nations, firm in

the conviction of our superiority, sought to adopt our methods, and failed simply because Englishmen and they alone-the dour descendants of Robin Hood's foresters-could wield the bow and advance with energy and perseverance to the combat. National tactics, however defective in systematic science, uniformly carry with them advantages over those borrowed from foreign nations, however proficient their armies are or are supposed to be. An officer who enters himself as a scholar in a foreign school openly acknowledges a superior. An army which servilely follows the rules and regulations enacted in another, admits its inability to work out its own salvation. possesses no original spirit. The minds of its leaders, instead of being constantly exercised in thinking out and elaborating systems of tactics and methods of manœuvring suitable to the peculiar dispositions and characteristics of its own men, become effete from inanition. It is a matter of common notoriety that up to quite recently our artillery regulations were based largely on the German artillery regulations of 1877; it is equally notorious that Von Schmidt's instructions for the German cavalry were, if not actually copied, utilised extensively by those who were responsible for the contents of our cavalry regulations that have been in use for the last thirty years. I have seen cavalry regiments marched hundreds of miles to a camp of exercise at which the whole time was taken up in practising the manœuvres as executed by the German and French cavalry at their previous autumn exercises. Commander-in-Chief in his excellent and practical memorandum says:--" In all ranks, from the private soldier to the General Officer, each step up the ladder requires a corresponding increase in the power of initiative." The precept herein inculcated meets with the most cordial approval of every officer in the army, but it must be clearly understood. The power of initiative must be diffused from the higher For I conceive that when the capacity to exercise the initiative permeates the higher ranks in the army, this valuable and much desired qualification, by constantly displaying itself

there, will soon filter down to the youngest officers, non-commissioned officers and soldiers. In this respect I would urge that those who are responsible for, or participate in the preparation of the regulations and instructions on which the training of our soldiers is to depend, should show by the originality of their work that they themselves are at least not wanting in this particular quality in which the junior officers and privates in the ranks are supposedly so deficient.

It is scarcely necessary for me to traverse the last thirty years to show how the most intelligent officers in our army have identified themselves with foreign systems and tactics; enamoured of everything foreign, and either ignoring or unacquainted with the peculiarity of the British character, they have followed blindly the dictates of foreign officers. It seems to me that in this obsequious following of foreign methods they have shown a certain want of public spirit, of esprit-de-corps, and of confidence in their own star. Are foreign officers such abnormally profound and original thinkers that the ablest in our army should array themselves on the side of their obsequious imitators?

Further I would ask, are we under any conceivable measure of obligation to them, that we should—even for a moment—forego that independence of spirit which is the proud heritage of our race? For the answer we must turn for a moment to that momentous period, during which—from the fierce fight in the wood of Vicogne where the English guards for the first time in the greatest struggle of modern times crossed bayonets with, and routed the republican soldiers of France, to the ever memorable 18th of June, twenty-two years after—England poured out her blood like water and spent her tens, nay hundreds of millions of money to bolster up the tottering thrones of foreign powers.

It was during this period that Great Britain alone firmly and nobly persevered to the end, and never laid down her arms until she had accomplished all the objects of the war. Whilst many of the foreign states in a weak and dastardly manner repeatedly deserted their engagements Great Britain alone fulfilled to the very letter all the obligations she had contracted with any, even the humblest, of the allied powers. And how were we requited? For years after, foreign military writers of whatever party, nation, or shade of opinion, were all at bottom, as displayed by their writings, imbued with a profound hatred of our country.

It seems unnecessary for me to recall the long list of murky compilations that have emanated from foreign military writers both during and since the conclusion of the late war against the Dutch Republics. Deliberately ignoring those momentous and heart-stirring conflicts of which we as a nation are so justly proud, these partial and jaundiced writers have gloated over what they conceive to be the misfortunes of our arms, and the ebb-tide of our national character.

I feel that the obloquy and ridicule that we have endured may be attributed largely to this imitative tendency which has been in evidence for years. By it our army has been forced into a system not at all in accord with its past traditions of bravery and intelligence. The act of imitation represses the efforts of the original mind. The act which is new and original rarely fails to make impression, and impression is success or the first step towards success in war.

#### CHAPTER II.

The character of the Anglo-Saxon is distinctly remarkable, and differs in many essential particulars from any which has yet appeared among mankind. Many nations have bequeathed to us their peculiarities and dispositions; and it is the blending of the whole which has produced the military virtues of the British character. These peculiarities of our character have been hardened and confirmed by the renovating storms which have passed over our country since the time of the Norman conquest. It was from the Wars of the Roses and the Great Rebellion—the darkest days in England's history—that the brightest traits of our national character and temperament were evolved.

The grand peculiarities of our race are its energy and perseverance: elements essential both for national and indi-That our men possess inherent qualities from vidual success. which can be produced the finest soldiers in the world, is I think undeniable. Experience gleaned from scores of battlefields in Europe, Asia, Africa and America, prove that they possess a greater degree of courage in times of peril and in the hour of danger than any others, and this can be attributed either to some inherent peculiarity of our race, or to the animating influence of our free institutions, and a long course of unparalleled and almost unblemished glory. Alison, the great historian of the war in which England saved Europea keen and dispassionate discriminator-says:-" It is their undaunted moral resolution, which in every age has formed the great characteristic of the British soldier. This quality gives them a great advantage; it is the true basis of a national Skill, experience, drill and discipline can be superadded by practice, or acquired by exercise; but if this moral quality—this inflexible resolution—is absent, all such acquisitions will prove of little avail. Howsoever inferior to their antagonists in experience, or that dexterity in the varied duties of a campaign which actual service alone can give, the British soldiers, from the very first, had the animating conviction that they were the equals, possibly their superiors in actual combat; and that all the advantages of veteran opponents would be at an end if once they engaged in a regular battle. And so it proved even from the outset; and it is inconceivable how this one quality of dogged resolution in the field came to neutralise all the superiority of acquired skill and veteran discipline."

And again, "When the hostile lines actually met, and the national resolution was fairly put to the test, the British soldiers from the very beginning successfully asserted their superiority. They were at the outset inexperienced, while their opponents had been trained in fifteen years of conflict and victory. Our infantry, in the steadiness and precision of their fire, the constancy which they displayed under danger, their calmness in anger, and the terrible vehemence of their charge with the bayonet, were beyond all question the first in Europe."

Thus Alison, probably one of the greatest historians of all time, sums up what he conceives to be the true basis of our military success. Nor can I, during the last hundred years of our national life, profess to see any portentous signs of deterioration, but at the same time I feel it my duty to warn those responsible for the education and training of our army, and the regimental officers as well, that in servilely following the dictates of foreigners instead of devoting their energies and ability to fostering and improving the national characteristics of our own men, they are neglecting the true source of military exertion in our race.

Our men still possess the old English plainness and sincerity, that generous integrity of nature and honesty of disposition which always argues true greatness of mind, and is usually accompanied with undaunted courage and resolution. The free born bravery of the Britisher was never more severely tried, and never did it demonstrate itself more than during those recent eventful days in Natal. That useful attribute of a soldier—to redouble his efforts when fortune goes against him—he has recently displayed on many a hard-fought field.

Captain Slocum, the American military attache with the British forces in Natal, says:—"They have not the individuality or resources of our men, but for indomitable courage, uncomplaining fortitude, and implicit obedience they are beyond criticism."

In fact the campaigns against the republican soldiers in South Africa—as celebrated in story as they are fertile in immortal achievements—have again reminded us that Tommy Atkins still—to his everlasting credit be it said—possesses that high sense of military duty, that instinctive principle of courage, that ever evident wish to earn the respect of his officers and comrades, that constant desire to uphold the honor of his regiment, that firm determination and unflinching resolve to defend the cause of old England, and an undoubted faith in the justice of her cause and the superiority of her arms, all of which in my opinion justify us in considering him the first soldier in Europe.

Nor must we forget our kinsmen across the sea. I recall with feelings of pride their patriotic ardour, mingled as it is with a chivalrous devotion; the knowledge that they are Britishers; the lustre of British descent; the glories of British renown animate every soul from Melbourne to Quebec; and with the well-founded pride arising from the contemplation of their vast natural advantages is mingled a strong and personal attachment to the Throne. The Englishman in Canterbury, the Scotchman in Otago, the Irishmen throughout the Colonies, the Canadian in his vast domains have borne with them from their great Home-land or have inherited from their pioneer forebears the loyal ardour and the high charac-

teristics of our race. Nor must we forget those Canadians who, although of French extraction, during the late struggle for right and liberty were foremost at the post of honour, for in years gone by it was to their loyalty and patriotic devotion to the Crown that we were largely indebted for the preservation of Lower Canada. The effect of this spirit upon the national character must not be overlooked. It contributes largely towards, if it does not entirely produce, that first and greatest step in social elevation—a forgetfulness of self and a devotion to others.

Bound as they are to the Empire by similarity of opinion and sentiment, it is not to be wondered at that the most perfect unanimity prevailed for carrying on the great contest which is still fresh in our memories; and the flame of loyalty burnt as steadily on the banks of the Murray, on the shores of the St. Lawrence, under the shadow of Mount Cook, on the slopes of the Berea, and on the banks of the Irrawady, as it did in the Mother-land itself. It was this unity of purpose, this whole hearted devotion to our noble Sovereign and Empire which brought our beloved country triumphant through the perils of that soul-stirring contest in South Africa, just as the same moving spirit enabled us to emerge successfully and with imperishable glory from the great struggle in which our country saved Europe.

In addition to the truly British spirit and the patriotic ardour which animates them, our Colonials are endowed with qualities which appear to eminently qualify them for the rugged trade of war. Their individual intelligence is high, for every profession and every class is represented in the ranks, and the excellent Code which compels a certain educational standard in the primary schools ensures a high standard of intellectual ability among the rank and file. Nurtured in a wholesome climate, bred to manly sports, and hardened by the free life in the back-blocks of Australia, the bush clearings of New Zealand, and on the frontiers of Canada, they are peculiarly fitted to undergo the hardships

and privations incidental to a long and trying campaign. The quality and energy of station life has stamped a character of pride and independence and of self-reliance on the descendants of the pioneers of Colonial enterprise to whose indomitable spirits we owe so much.

As irregular horsemen their work is excellent, and when their officers are absent, or when command, as it often does in modern war, becomes impossible, the self dependence of the individual asserts itself with the best effect, and animated by a common feeling and strong in the confidence of mutual support they display a power of initiative never yet realized as possible in the ranks of the regular army. On outpost and on patrol, in seeking information, in counteracting the ruses of the enemy and in readily adapting themselves to the peculiar circumstances that confront them, their keen intelligence is of the greatest value. Expert in the handling of the rifle, and dexterous in the management of horses, a few weeks training soon fits them to take the field, and the lack of regular training is adequately compensated for by their mutual willingness, their enlightened zeal and their dogged determination. Familiarized by their early life to toils and fatigues, and accustomed by their bush life to the cold, wet, and mists of a forest country, they are not easily affected by sudden climatic changes, to combat which their ingenuity in extemporising cover from the scanty materials at their disposal is unequalled. They are capable of relying on their own resources for their food supply, and for preparing it under conditions of great discomfort.

Habituated to mentally noting different points in the landscape which will be of use to them when they have to return in the dark, or by a different track to that which they followed when leaving camp, they furnish the most reliable mounted troops for extended reconnaissances and night enterprises.

From their association with country life they estimate with greater correctness than the regular soldier the advantages and disadvantages of ground, and their keen vision affords a marked contrast to that of the barrack trained soldier, for they are able to discover with the naked eye objects at a distance which the latter finds difficult to locate with a field glass. They judge distance by night or day and under the varying atmospheric conditions to be met with in the field quickly and with sufficient accuracy for all practical purposes.

Their courage is the courage of their race, and indomitable indeed are the hearts that beat beneath their khaki jackets, and their spirit rising superior to all misfortune is a marked characteristic of the Colonial soldier. Self reliant always, quick with their horses, fair shots, splendid riders, and gifted with strong natural sagacity and an intuitive perception of what is best for them to do under novel and unexpected conditions, they are capable of being turned into the best mounted riflemen in the world.

If we turn now to the Native Army in India we find that, although wanting in many of the qualities which are essential for the growth and greatness of a nation, the Native soldiers are gifted with peculiarities which fit them to take a prominent place in the military system of the Empire. Recruited almost entirely from the pastoral communities of the plains and the herdsmen of the mountains on the frontier, they are familiar with much of what occurs on a campaignvicissitudes of heat and cold, and changes of weather. are generally accustomed to that frugal and homely mode of living which is so essential, and which, if appreciated at its true worth, generally relieves a commander of considerable anxiety in the field. They are as a rule hardy and inured to bear bedily toil. The shepherd and the farmer who become soldiers, from their association with country life from infancy, estimate with greater correctness than others the advantages and disadvantages of ground. Their keen vision affords a marked contrast to that of the townsman; they are usually healthy, they consider it no hardship to sleep in the open air-in a ravine or on the hill side without much covering; their fare at their native homes is not delicate, and rarely

as abundant as that of a soldier on active service, and being unaccustomed to the artificial refinements of civilization and the luxuries of high living, they afford splendid material for the arduous requirements of a campaign. The Romans were soldiers and field labourers at the early period of their history. Their character was thus formed in a school which is calculated to give prominence to man over his fellows, inasmuch as it improves physical power and supplies the means of attaining knowledge of things that are analogous to those which occur in war. Their recruits were selected from country labourers, from the toilers on the farms and from the men who watched their herds on the hills by night and day, in preference to the population of towns. Under the reign of the kings and in the days of the republic, the soldiers were almost all enlisted from the classes mentioned above, and as such, they were simple in manner, of good physique, possessing great stamina and hard in bodily frame. The Native Army to-day is recruited from the same class of The farms and villages all over India and the mountainous districts on our frontiers supply our regiments with men brought up under the same conditions and with the same environments as those under which the soldiers of Republican Rome were nurtured and inured to hardship. The progress of the Roman arms was extraordinary; in the zenith of their power nothing seemed impossible for them to accomplish, and in my opinion their unprecedented successes are to be largely attributed to two very simple lines of policy Firstly, they adopted an original which they followed. method of fighting, or modified others to suit their own armies, and secondly, they utilized to the fullest extent possible the advantages which nature had vouchsafed them in filling their armies with men who were by nature soldiers before they joined the legion to which they were attached.

One of the most striking examples of the break-down of a military system through adopting methods of fighting neither consonant with the character nor in harmony

with the spirit of its race, is that afforded by the sudden and extraordinary collapse of the Mahratta military system The Mahratta horsemen, at one time numbering in India. nearly 200,000, carried the authority of the Peishwas to the gates of Calcutta, and planted their standards before the walls of Lahore, and when to their already invincible hosts were added the Western methods of organization and tactics introduced by De Boigne, they appeared to be within measurable distance of attaining permanent and lasting control over the destinies of the whole of India. But the last named innovation proved of doubtful advantage, since the introduction of infantry and artillery forced them into pitched battles such as Laswaree and Assaye, which stand out as striking landmarks in the dismemberment of their power. Tied down to their recently raised infantry, their national cavalry had lost what were to them the springs of their military successes, namely their intangibility, their mobility, and their confidence distant enterprises. The great Pro-Consul Warren Hastings in referring to what was considered a growing danger to British power in India said:-" The danger you allude to in the progress the Mahrattas are making in the casting of cannon, and in the discipline of their armies, is imaginary. The Mahrattas can never be formidable to us in the field on the principles of an European army. are pursuing a scheme in which they can never succeed, and by doing so they detach themselves from their own plan of warfare, on which alone, if they acted wisely, they would place dependence."

This prophetic condemnation of their unwisdom in deserting a military system which was the result of their surroundings and temperament, found ample illustration in the Pindari War, and as already stated at Laswaree and Assaye, the Dake of Wellington had good cause to thank De Boigne for transforming the mobile and ubiquitous irregulars into a slow moving and vulnerable army capable of being attacked and brought to bay.

The Afghan in his mountain home, possessing the instinctive military sagacity and the hardihood of an Alpine race, has, though badly armed and equipped, displayed such an energy in war as has repeatedly tried to the utmost the ability of our commanders and the courage of our regular troops, and time alone will show whether forty thousand of them organized into regiments, batteries and battalions, and trained to Western methods of fighting, will be able, in the valley of Herat, to offer the same measure of resistance to the onward march of a European army, as the same number scattered among the hills, the ravines and the fastnesses of their native country, and fighting in a manner natural to them, and in accord with the native spirit and temperament of their race.

In addition to the already mentioned peculiar advantages which our native soldiers possess, we find that they have always displayed an extraordinary fidelity, a steady courage, a sobriety during duty, a docility in the ranks, a patience under privation and an unswerving confidence in their British officers, such as has seldom been equalled and never surpassed by the soldiers of any nation. No soldiers are more amenable to the restraints of discipline, and when treated with consideration, none more loyal and faithful in the discharge of The light, active, and intelligent Muhammadan horseman of the Deccan, the heroic Sikh, and the dashing Gurkha infantryman, the daring and impetuous Pathan and Beluchi, the chivalrous Mahratta, the proud Rajput and the sturdy Jat enlisted in the ranks of our army, have, on many a hard fought field, displayed a self abnegation, a devotion to duty and a loyalty to their colours, such as no mercenary army has exhibited in ancient or modern times.

It is not within the scope of this work to point out deficiencies, but if with reference to the Native Army I mention the want of interest in the individual, the extraordinary ignorance of the rank and file, the total absence of power to take the initiative, the stifling of responsibility, the want of enthusiasm and the lack of patriotic

ardour, it is merely to point out the objects to which our efforts should be directed in the future. It is in scouting and reconnoitring thirty or forty miles in advance of an army, rather than in formed brigades and divisions, that the light horsemen of India will display their peculiar characteristics to the best advantage, and uphold in the stern arena of war the reputation which they have hitherto held of being the finest light cavalry in the world.

From what has been said, I think it has been conclusively shown that nature has bountifully gifted us with qualities which qualify us to again take and maintain a position in military greatness which the responsibilities of our Empire would appear to demand. Our real strength appears to be in the public spirit and energy of our people, and in the moral influence of centuries of glory. What have we done or what are we doing to elevate or even to maintain the national character? I note with the liveliest satisfaction that there are not wanting signs of an awakening interest in the great question we are considering. Only quite recently, those able and talented men who are responsible for the conduct of the Educational Code in Great Britain showed, in no uncertain manner, that they are fully alive to the responsibilities and potentialities appertaining to their office. publishing the Code in 1904, they, in their introductory remarks, set forth clearly and distinctly what they conceived to be the true basis on which the education of the rising generation at Home must rest. "The purpose of the public elementary school," they said, "is to form and strengthen the character, etc." Here we have at last a succinct and at the same time official recognition of the fact that it is to the maintenance and elevation of our national character that their efforts are in future to be directed. They desire to awaken throughout the length and breadth of the land a living interest in those traits upon which the future destiny of our race depends. Our boys and girls may attain a high standard in the arts and sciences; they may be pre-eminently

fitted to read Virgil and Homer; in fact they may emerge successfully from years of weary study; but it is not until the highest ideals of the national character have been indelibly impressed on their minds, that they can be expected to take an intelligent and efficient interest in the government and welfare of our nation. They further point out that primary education, if it is to achieve any measure of success in fitting the youth of Great Britain to play their part, must direct its efforts to training them in habits of observation and reasoning, and that a living interest in those ideals and achievements, which are the common heritage of our race, must be aroused and must permeate every grade and rank of our society.

The "Times" in commenting on the Code says:—"The really fundamental feature of the new code is its frank recognition of the education of our children as an integral part of the national life, and as a matter demanding all the freshness and vitality that can be imparted to it. Other countries with a clearer and more comprehensive vision have perhaps been before us here. They have realized that there is nothing of more importance to the future of a nation than the training of its children in an intelligent patriotism, and they have not grudged pains or money to this end. At last there is an awakening, and intelligent men alive to its potentialities are exerting themselves."

Can we by virtue of our position as officers in the army do anything, however small, towards seconding the efforts of those Directors of Education in Great Britain. We have in different parts of the Empire approximately five-hundred thousand of our young and active youth under our direct control and supervision. Week in and week out throughout the year we have the men collected together in class and regimental lecture rooms for instructional purposes, during which if officers so desire, they can talk to the men on a subject that cannot fail to be of interest to them. If we are agreed that it is owing to those peculiar qualities with

which nature has so bountifully equipped our men, that we have been able to steadily progress among the great nations, surely it is expedient that we should foster and encourage rather than neglect them, and to do this our past records afford ample material from which we can readily deduce and exemplify the peculiarities which have given our men such pre-eminence in the past.

The traits of heroic character which are portrayed in the records of our national history, may also be employed with advantage to improve the military education of our army. They animate courage to acts of enterprise, and they cement action by a national bond of union, inasmuch as they place national glory on a point of elevation to which all eyes are directed.

They offer repeated opportunities to the officer to bring prominently to the notice of the men those characteristics which we claim to be exclusively our own. For this reason I should like to see Mr. Fitchett's works added to every garrison library and soldiers' institute. That able colonial writer has placed within our reach a series of volumes which cannot fail to be of absorbing interest to the British officer and soldier. "How England saved Europe" and "Deeds that Won the Empire" are soul stirring records of deeds performed by British officers and men in many climes and against different opponents; and in every page, apart from the skill and bravery of our commanders, they furnish us with materials for illustrating and explaining to the men the dispositions of the soldiers who participated in these great It then becomes the business of the officer to impress on the men that it is to these elevated characteristics of our race that our unrivalled success as a nation in civil as well as in military and naval life has been due, rather than to any superior system of strategy and tactics. supposing an officer who feels that it is a part of his duty to endeavour to awaken an interest in the subject we are discussing, has his men collected in the lecture room. He is a

practical man, well versed in the records of military history, both of our own and foreign armies, and he recognizes that in order to achieve any measure of success in the lecture room the language he employs must be simple and suited to the men he is addressing. He might in his first attempt proceed somewhat as follows:

"Now, men, I have at the last two or three lectures told you what I think you ought to know about outpost duties. To-day I intend to tell you something about yourselves. I know you all, for some reason or other, feel that you are superior to any foreigners you have either met or heard about, and I am glad you do think so, but within the hour at my disposal to-day and on future occasions whenever the opportunity offers, I intend to explain to you in what particular way our men have hitherto shewn that they possess soldierly qualities such as would appear to justify us in thinking that they are better than others.

"To enable me to do this I intend to tell you about the doings of our soldiers in different campaigns during the last hundred years, and I shall begin with what is known as the Peninsular War. Before that time, the German, Austrian, and Italian armies had been over and over again beaten in fair fight by the French armies under Napoleon. countries had been overrun, their lands laid waste, and their nations humbled by the soldiers of France. While this was going on our country sent a small army to Spain and this little band of Britishers was able for more than five years to oppose successfully these same Frenchmen although they had great armies and great generals who had fought successfully in many campaigns. I shall commence to-day by telling you about these British soldiers who kept on marching and fighting, sometimes defending, sometimes attacking, sometimes gaining ground, sometimes losing it, undergoing great hardships, suffering terribly from fatigue and sickness, but still always believing that they were better than the veterans of France, if only they could get at them.

"The French armies gradually retired before them, and at last, fighting like Britons, and you know what that means, they crossed a great range of mountains and stepped proudly on to the soil of France. These men were led by the Duke of Wellington and you may think that he did all this. You are quite right in thinking he did a great deal towards the success of our arms, but when I come to tell you the story of some of those names which you bear on your colours, you will see that the men themselves, owing to certain points in their characters, helped largely to earn such a great name for our Army. And I want to draw your attention to these points because you all possess these qualities and I wish to impress them on your memory so that as long as you remain in the Army and when you retire into civil life, you will always feel proud that you are Britishers."

The officer then proceeds with his account of the British soldiers. The lecture should be short, and with this idea before him, it will generally suffice if he relates one incident at each lecture and impresses on the men the deductions It is not long since I had the honour of attending the particular day in the year set apart to commemorate a famous battle in which a regiment had played a gallant and conspicuous part. As I walked on to the ground I met three or four men and stopped to ask them if they were enjoying themselves, to which they replied in the affirmative. I then asked them against whom this battle was fought, to celebrate which their sports were being held. They looked at each other in blank astonishment. I felt sorry for them, and could not help feeling that their interest in the day would have been considerably enhanced had their officers taken five minutes to tell them something about it. recital of the "Deeds that Won the Empire" animates the men with feelings of admiration for our Army; it stimulates them to deeds of daring after the manner of our forebears; it awakens in them an interest in those ideals and achievements which are the common heritage of our race; it excites

the national sentiment and contributes in no small degree to the feeling that given a fair field and no favour, our soldiers are still equalled by few, and surpassed by none. It is upon the preservation of this spirit that the safety of a nation must depend. It is in vain that it may be encircled with fortresses, or defended by mountains, or begirt by the ocean; its real security is to be found in the valour of its people. The army which enters the field in the conviction that it is to conquer, has already half gained the day. The people who recollect with pride the achievements of their forefathers, will not prove unworthy of them in the field of battle. remembrance of their heroic actions preserved the independence of the Swiss republics amidst the powerful empires by which they were surrounded; and the glory of her armies, joined to the terror of her name, upheld the Roman empire for centuries after the warlike spirit of the people had become It is this which constitutes the strength and multiextinct. plies the triumphs of veteran soldiers; and it is this which renders the qualities of military valour and prowess hereditary in a nation.

Every people accordingly, whose achievements are memorable in past history, and whose ancestors have displayed in a prominent manner, self-denial, self-abnegation, and selfsacrifice to further the interests of the State and the welfare of their fellow-citizens, have felt the influence of these national recollections, and received them as the most valuable and treasured inheritance from their forefathers. The statesmen of Athens, when they wished to rouse that fickle people to any great or heroic action, reminded them of the national glory of their ancestors, and pointed to the Acropolis crowned with the monuments of their valour. The Swiss peasants, for five hundred years after the establishment of their independence, assembled on the fields of Morgarten and Laupen, and spread garlands over the graves of their fallen warriors, and prayed for the souls of those who had died for their country's freedom. The ministers and officers of Japan,

from the Mikado on his throne to the humblest officer in the army, stimulate the patriotism of the present by the memories of the past and invoke the shades of their "Samurai" of feudal times to sanctify the cause in which they are engaged. In their struggle for freedom they conceive the cause to be nobler, the end greater, the motives more exalted than those which animated the warriors of the Iliad. And so strongly has the Japanese heart been stirred, so profound the emotions excited by recent events, that their influence is felt throughout the length and breadth of the civilized world. With a nation so universally capable of sinking self-interests and desires. leaders so renowned and yet so regardless of self, forces so vast, courage so unshaken, influenced by passions so just and estimable, enthusiasm so exalted, devotion so profound, it is not I think anything to be marvelled at that their heroic deeds should awaken the interest, and excite the envy of Christendom. The passion of the Japanese may at times appear wild, extravagant, and, to the more sober minded people of the West, irrational, but it is noble, disinterested, It is founded on the sacrifice of self to duty; and heroic. not on the sacrifice, so common amongst ourselves, of duty to self.

Tactics and strategy are dry subjects at the best of times; outpost lectures and discussions on advanced guards, when continued without a break, lead to inattention and lack of interest. A chapter here and there from Fitchett would, I feel, supply the necessary tonic, give the soldiers something to talk about, encourage them to progress in their work, imbue them with a feeling of superiority over all comers, increase their good opinion of the profession they have adopted, whet their appetites for war, and infuse into them the desire to emulate and even to excel those "Deeds that Won the Empire." Those officers who are large-minded enough to see that in the out-of-way corners of the barrack room they can do something towards elevating the national character, by keeping prominently before the men those

characteristics of our race which have contributed so much to our national successes in the past, must not be disappointed if their efforts are not applauded or even appreciated in the It is not in the confidential report of their right quarter. commanding officer, nor is it in the annual report of their general, that they will find their reward, but rather on the field of battle, when their men, enlightened by the knowledge they possess, and imbued with a strong sense of the superiority of their race, will step into the arena against any and all comers with a determination to succeed which no mechanical drill can give them. And should the opportunity which we all long for never come, they may rest content, conscious of having done their duty, and with the feeling that the soldiers who return, and are returning yearly to civil life, will be better and wiser men and better fitted to perform their part honestly and loyally as capable and intelligent citizens. Further, I am of opinion that it is in an increased interest in the individual soldier somewhat on the lines indicated above, rather than in any amount of legislation, that the difficulty of recruiting and the present prejudice of the men against extending their period of service with the colours, will be overcome.

Not only in every regimental school and barrack room, but throughout the length and breadth of the Empire wherever the British uniform is worn, wherever men feel proud to be classed among the defenders and upholders of our Empire, I would urge on all officers the importance of giving their attention to this subject. The militia officers in Canada, the Volunteer officers in New Zealand, and the officers of the Commonwealth forces of Australia, can, in their drill halls and orderly rooms, contribute largely to instilling into the minds of their men those traits of our national character which have been handed down to us by those who have done so much for England. Animated by the same spirit those responsible for the training of our land forces should devote their energies and abilities solely to the perfection of such systems of tactics and training as will enable us to bring into line all the available forces of

the Empire, and to so use them in the field as to permit of the peculiar qualities of each being fully utilised to the advantage of the whole.

The campaigns of 1866 and 1870 may offer opportunities for our higher commanders to gain an insight into the methods found suitable for directing large forces in the field, but that our officers and men should be fettered by systems borrowed from others is in my opinion radically wrong; and I cannot help thinking that those who so strenuously uphold the doctrine of imitation are either devoid of, or are simply incapable of, exercising their thinking faculties, and are content to rely rather on the experiences of the past than to speculate on the possibilities of the future. I unhesitatingly affirm that the military regime which adopts a system of tactics, which does not take into consideration and give due prominence to the localities in which campaigns may have to be fought, to moral circumstances, and last but by no means least, to the national characteristics of our race, commits an error the magnitude of which no man can estimate. Instead of pondering over the productions of foreign staffs let us rather commence with the peculiar and advantageous qualities and characteristics of the material at our disposal as the basis of our efforts, and endeavour to evolve an organization and a system of fighting at once Imperial in design and in harmony with the national spirit. I record with the keenest satisfaction the fact that in the Regular Army there are distinct signs of an inclination to solve from our own experiences and intelligence the question of training best suited for our officers and men. The drill regulations issued during the last two years show a distinct departure, and evince a decided appreciation of the continual and ever increasing influence of new elements and agents upon the fabric of military organization and administration. that remains for those responsible for the training and organization of the military forces of the Empire, is to constantly direct their efforts to co-ordinate into one harmonious whole the heterogeneous systems at present in force, and to readily

recognize that it is only with an Imperial Army imbued with a common purpose and animated by a common sympathy, possessing its own spirit and acting always with the spirit of an original, that success in the future can be assured to the arms of Imperial Britain.

Then, and then only,—
"Nought shall make us rue,
If the Empire to itself do rest but true."

## CHAPTER III.

To train the soldier to use his rifle with effect, and to obtain the best results in the shortest possible time with the minimum wastage of ammunition; to teach him to judge distance rapidly up to at least 800 yards and with such accuracy that he can, quicker than any other soldier in the world, begin to drop shots within a few yards of his enemy. to make him observant and capable of taking an intelligent interest in his own musketry efficiency, provides the officer with an ever changing and an ever increasingly important and interesting subject, which, if judiciously and intelligently handled, never fails to arouse the interest of the soldier in his And in the points mentioned I have touched only the work. four corners of the subject-there are the side and centre lines to be entered before the ground plan begins to take intelligible shape. To explain to him the various kinds of cover to which there is no finality, and the different methods introduced to permit of his using his rifle effectively from behind any or all of them; to so train him that he can approach a position like that of Mukden, with a million bullets falling, like a cataclysm, around him; to teach him what an old shikari would tell him, to reserve his ammunition until he can see the game and it has come within effective range; to impress on him the great advantage to be obtained by the whole of his section firing at one gun instead of each man firing at each of the 22 guns scattered along a position; and to impress on him that the liabit which has been in vogue in our army for years of thousands of men lying down and firing straight to

the front is the very negation of an intelligent use of the splendid weapon the government has placed at his disposal; each and all of these subjects are of engrossing interest and of increasing importance if the comparatively small number of men at our disposal is to derive the greatest benefit from the training of our officers and non-commissioned officers at the Schools of Musketry.

I cannot help pointing out that there is far from being an unanimity of opinion as to the advantages to be derived by regimental officers and non-commissioned officers having to spend two months at these schools. There are many. and among them commanding officers, and officers of even higher rank who feel, perhaps not unjustly so, that Schools of Musketry do little towards promoting the of the Army as whole. a There fact, an inclination to put every obstacle in the way of detailing officers as assistant instructors, and were it not that the regulations require that non-commissioned officers must possess a musketry certificate before they can be considered for promotion to the commissioned ranks in the Indian Army, it is quite conceivable that few would volunteer for the course of training, which government provides at great expense.

When we remember the increased importance of rifle fire for both cavalry and infantry, and the unquestionably increased importance of well handled long range artillery fire in modern war, I think it is a matter for extreme regret that the mixed feelings and opinions as to the doubtful utility of our Musketry Schools should have assumed such serious proportions. When commanding officers of wide and varied experience in the training of officers and men openly proclaim that they can produce better results regimentally, I think that it is quite clear that there is something amiss and it behoves us to be up and doing, and if the Schools themselves, the systems prevailing there, or the methods of instruction and training

adopted, are not such as to create a liking for the subject and to send students back to their regiments imbued with a its profound importance, then they to undoubtedly appear to miss the opportunity of exerting that influence over the training of the army in which they should play the most conspicuous part. The officers and noncommissioned officers should, in my opinion, go back to their regiments fortified with the knowledge acquired, impressed with its utility, and with an increased confidence that they are better leaders of men, better able to effectually command their companies and sections on the battle-field, and so handle even the smallest units as to derive the greatest advantage from an effectual, common sense, and practical use of the rifle. That these results are not attained and that commanding officers find the practical musketry in their regiments neither promoted nor stimulated by those who, often at great inconvenience, have been permitted to absent themselves from their regiments for two and a half months, is largely due not to the syllabus itself which is an excellent one, but rather to the fictitious importance hitherto given to the majority of the items in it by instructors who have grown up in the belief that the pattering off by heart of a chapter on screws, pins, swivels and bolts, is of more importance than the tactical application of fire. The end and object of all musketry training, viz., the tactical employment of the rifle in war so as to ensure a superiority of fire both in volume and accuracy whenever our men come in contact with the enemy has been lost sight of, or swallowed up in a maze of bewildering detail regarding the intricate mechanism of the rifle and machine gun and the scientific theories appertaining thereto. That nearly six weeks out of two months available should be devoted to pattering off pages of detail on the firing exercises; to acquiring an absolutely correct book knowledge of the mechanism of rifle and machine gun, which the regulations direct must never be taken to pieces except by a certificated armourer; to committing to memory scores of paragraphs concerning the

manufacture and ingredients of cordite, etc., which an officer forgets as soon as he can; and the devotion of nearly a fortnight to ordinary shooting on the range which can be as effectually and efficiently acquired regimentally, have, each or all, contributed in a varying degree to the present almost general want of confidence in the practical utility of Musketry Schools.

I think it is to be deplored that many of the ablest officers in our Army should hold and proclaim far and wide that there was, and is, little or nothing to be learned from the great conflict which for nearly three years convulsed South Africa. I have personally never regretted the time I spent there, for, although I am ashamed to admit it, I learned more, infinitely more, there in two years than my superiors condescended to teach me during the whole of my fourteen years previous service in India. The advantage of an intelligent utilisation of ground, the advantage of cover properly utilised both in the attack and on the defensive, the demoralization brought about by timely and rapid bursts of fire, the capacity conferred by a long ranging and accurate rifle to concentrate from a distance on different portions of the attack or defence, the advantages and disadvantages of smokeless powder, the immense importance of flanking and enfilade fire, the necessity for co-operation between different portions of the infantry line to assist the advance of neighbouring sections, and the importance of fire co-operation between the three arms on the battle-field, and many other points, all of which were neither fully understood nor appreciated at their true value by our commanders before the war, were brought home to me in a forcible manner. It is in a correct estimate of the importance of such points as these that is to be found the sure and certain path to a high and practical standard of musketry efficiency in our Army. I trust every junior officer in the Army will ponder these words and not allow themselves to be led away by those who still prefer their German methods to what an 'expensive and hard-earned experience has taught us to be essential if we are to derive, in our next campaign, the fullest advantages possible from our splendid men and weapons.

The Combined Training lays down that, The soldier must be so instructed that he may be able to comprehend the meaning and object of every movement he is directed to carry His individual intelligence should be called into play. Now this is one of those sententious phrases which, like many more in our drill regulations, fails to meet the eye, or if it does the importance of it is either not realised or the difficulties in the way of its attainment appear so insuperable that it is either neglected altogether or but feebly grappled with. were many, very many, sentences indeed in our drill regulations for the three arms which were in our hands for years before the war broke out, but which were either overlooked or neglected. the proper appreciation of which by infantry, cavalry, and artillery would have minimised or obviated many of the tactical blunders that have been brought to light. Now I wonder what efforts our company and squadron commanders have made since the peace of Vereneging to make their soldiers think for themselves, or what have they done towards rendering themselves less dependent on the orders of their company and battalion commanders in the field? Can they say that their men to-day can individually make an intelligent use of ground, do they think for themselves, can each man improvise cover for himself and appreciate its application, can he make use of his mental as well as his physical powers, can he use his rifle intelligently in each and every situation that presents itself, does he use his wits and is he resourceful? These, and many more points, have to be weighed when we desire to ascertain whether the individual intelligence of the soldier has been called into play and whether he comprehends the meaning and object of every movement he is directed to And in no part of his training is this individual intelligence more necessary, and its existence or non-existence more apparent, than in the use of the rifle in the field. The

In the British service where a fair proportion of the men

who ioin the ranks have at least an elementary education. and where a tolerably fair percentage of the remainder can. and do, take advantage of the educational facilities offered by the regimental schools, I think it is only fair to assume and right to demand continuous efforts on the part of the officers to encourage and promote individual intelligence wherever their musketry work is concerned. But with regard to the Native Army I am sorry to say we are met by an almost insurmountable barrier in the universal ignorance and illiteracy of the rank and file, and for this reason alone I am afraid, that if the Native Army were put to the test to-morrow it would be found to be appallingly deficient in that individual intelligence and initiative which are rightly considered so essential to success in modern war. The Japanese is beyond all question superior to our Indian soldier in this respect, but it will not be altogether the fault of his British officer if the Native soldier fails us on the day of trial. The entire absence of trained teachers capable of imparting instruction, the almost entire want of any system of primary education throughout India, and the apparent failure to realise the need for at least a sub-stratum of intelligence in the rank and file, or to recognise the fact that it is the intelligent man behind the rifle, and not the rifle itself, that will win victories for us in the future or stave off disaster, has placed us in a situation and finds us in a condition which cannot be regarded with equanimity. The Native non-commissioned officers attending the recent course of instruction at the Bellary School of Musketry were selected men, men probably next for promotion, and yet I found that their minds are the minds of children, and their reasoning powers as extinct or as non-existent as the dodo. They could patter off in parrot-like fashion whole paragraphs and even pages of the regulations, but if I stopped them with a simple question such as why should a soldier husband his ammunition, or why should men who cannot see the target, refrain from firing they could not tell me. If this is the normal condition of the picked non-commissioned officers of the Native

Army, what is the condition of the rank and file? How are the soldiers in the ranks of such an Army going to conduct themselves on the battle field, often in the absence of their leaders, or when, owing to the present wide formations and the stress of battle, their leaders cannot get near them or even How will such men act without convey orders to them? orders, how can they intelligently comprehend the situation which will be explained to them before they are launched to the attack, can they be relied on to act and think for themselves according to the circumstances that will arise, can they be depended upon to be self-reliant, resourceful or self-helpful, are they capable of accepting the least responsibility or displaying in any degree that capacity of initiative which is such a marked feature among intelligent men? These are questions to which I am sorry to say I cannot return a satisfactory answer, and they are ones that it behoves the officers of the Indian Army to ponder deeply and to realize that there is a great deal yet to be done before they can rest on their oars.

Throughout the whole syllabus of the soldier's training, there is perhaps no part of it which demands more intelligent application and which produces more decisive results in war than the intelligent use of the rifle in the fight. The man may be a good shot on the rifle range, he may be able to patter off by heart' the rules for aiming, his weapon may be the best that art can devise or science produce, and yet if he cannot intelligently use it in the field its tactical utility will be lost or the results obtained as exiguous as if he were armed with a Snider or even a Brown Bess. It is to the methods most useful, and to the systems most likely to produce good results in this direction, that I would like to see more attention given at our Schools of Musketry. I would like to see students, both officers and non-commissioned officers, go back to their regiments armed with the knowledge that they thoroughly understand and know how to command their sections, companies, or squadrons, so as to derive the greatest effect from their rifle fire, that they know how to manœuvre their

commands in any or every situation so as to inflict the greatest loss on the enemy, and that they know how to use their fire to the best advantage when attacking or defending, when on outpost, when holding a defile, when commanding a flank company or a patrol, in fact in every conceivable tactical situation that may arise. Not only this but that they know how to co-operate by fire to secure their own advance or to further the advance of bodies to their flank or rear, that they know how to utilise to the utmost and at every opportunity oblique or enfilade fire whether in the attack or on the defence, that they know how and when to husband their ammunition and when to pour it out like water on the enemy, that they are thoroughly grounded in every conceivable advice for maintaining communication with troops to their flank and rear, and for passing and receiving information concerning the enemy or our own troops, and last but not least that they fully appreciate the advantages of co-operation with troops in their vicinity and with their artillery and cavalry. This is the standard I would desire to see set up for our Schools of Musketry if they are to exercise any influence over the training of our Army. The officers who attend them will then, I feel certain, go back to their regiments better officers and non-commissioned officers than when they left them, better leaders of men, with an increased confidence that they are able to instruct and lead their men in war, and firm in the conviction that whether in command of a machine gun or fifty riflemen they will know how to use them to the best advantage so as to ensure the greatest loss or demoralization to the enemy in the shortest time, in whatever tactical situation that may confront them.

I do not wish it to be understood that the Boer War has introduced any startling developments or brought to light anything very remarkable that was not known before with regard to infantry tactics and the tactical employment of the rifle in war. The struggle at St. Privat and the various assaults on Plevna convinced even the most casual student of

history that advances over open ground in broad daylight, in close masses, were next to impossible when opposed by an enemy who knew how to use the rifle. The Russian attacks on the Skipka Pass and Skobeleff's experiences before Plevna revealed to all who chose to learn that the spade would play an important part in future attacks. It was proved in 1870 that superiority of fire could only be attained by a constant and close combination of infantry and artillery fire at every stage of the attack. Lee and Jackson repeatedly proved that to successunexpectedly manœuvre an enemy out of a fully and prepared position will often produce a greater moral effect on him than defeating him in battle. They both repeatedly and conclusively showed that turning movements if they are to be successful must be carried out secretly, promptly, and with determination; that in mystifying, misleading, and surprising the enemy lies one of the grand secrets of success in war, and that it is in dexterously enveloping a foe that the greatest and most startling effects of modern long range guns and rifles are to be produced. It was at Plevna, where the Turks smoked cigarettes, played cards, and drank coffee behind their shelters that the impotence of artillery fire against intelligently devised and well constructed entrenchments was just as clearly demonstrated as it was at Paardeberg, and at Gettysburg the destructive effect of a converging fire against an enemy attempting to force the centre of a long line of infantry was as apparent as the noonday sun. The campaign of Bohemia forty years ago convinced those who participated in that great conflict that under the stress of modern battle the dissolution of tactical units was an inevitable result of deep formations and constant reinforcements and that the control of the firing line by superior commanders was a thing of the past.

This is what a German Correspondent of the "German-Japan Post" says regarding the tactical employment of the Japanese forces during the wa. in the Far East:—

"COVER-One of the chief impressions of Japanese tactics left on my mind has been the extraordinary way in which they

concealed their positions and movements. Only a few hundred vards off lay their infantry of whose presence one was unpleasantly aware by the bullets that passed over one's head, but one practically never saw them. An upraised arm, the top of a head-dress projecting from behind cover,—that was all one ever saw, whole figures one never saw, even in the The machine guns were concealed with the same skill. One could hear them but could not locate them, but one could appreciate that they were being well worked. Even with the field artillery it was just the same, even when one 'spotted' the hill on which guns were in action it was nearly always impossible to locate or count them. Never once did I see movement of troops in closed formation, reinforcements and reserves were always brought up, usually at night, but always perfectly covered, and the new dispositions were usually first announced by heavy fire from a point where it had not been before. the few occasions that one saw exceptions to this rule the result was usually failure. I never once saw artillery come into action, their presence was shown by their fire. Infantry fire was both accurate and quiet, if a crisis occurred in an action it immediately increases enormously in volume, but without sacrifice in accuracy. The object of the operations as a whole was usually a progressive outflanking and turning movement. The Japanese thoroughly understood the nature of modern musketry fire, and how a concentric fire could only be obtained by getting round the enemy's flanks. I remember once (when on the Russian side) seeing the Japanese envelope us on three sides at once most skillfully. Their enveloping movements depend largely on knowledge of the ground, when they cannot obtain such knowledge they occupy suitable positions, entrench themselves in the latter, and thence enfilade their enemy. The moment the enemy begins to move they bring artillery to bear on him, in a way which clearly shows how wonderfully the two arms co-operate. Infantry long-range fire, i.e., from 1,500 to over 2,000 yards, was similarly employed freely against a retiring enemy.

"POSITIONS—The infantry positions were relatively weakly held but their mutual support was always available. In this way they economise their men and multiply their forces.

"LEADERS—Throughout I thought the leading admirable, and it was remarkable how they discovered the weak points of an enemy's position and then patiently went for it."

The fact of the matter is that the present portentous struggle in the Far East has confirmed, with scarcely a single exception, our experiences of modern fire in South Africa. It has shown that concealment of artillery and its close and active co-operation with the infantry is of primary importance on the battle field, that in broad daylight men can only approach a position by dribbling from cover to cover and by crawling from rock to rock, that the reconnaissance of a position is so difficult that it often takes days to carry out, but that it must be performed much more carefully and minutely than was ever attempted by our commanders in South Africa, or than is ever carried out by them during peace manœuvres at the present time, and that there is no time nowadays for one arm such as cavalry to sit on their horses for days, idle spectators of a fight in which all the hard knocks fall to the infantry, waiting for opportunities to pursue, which may never come as at the Alma or at Mukden. The war, like that in South Africa, has also shown that intelligent individuality atones for many shortcomings in other respects, and above all that it is only by that intelligent direction which ensures the active co-operation of all arms, and by the constant application of the great principle of mutual support in the firing lines that operations can be brought to a successful conclusion.

Hitherto one of the weakest links in the tactical training of our Army has been that both officers and non-commissioned officers have relied too much on the drill books for information, as to how to solve every tactical problem that presents itself. We should not regard the drill book as a lame man regards a crutch, and yet this is what I fear a great many juniors,

and in not a few cases seniors also, are inclined to do if we can form any opinion from our tactical fitness examina-Officers cram up a few guiding principles contained in the drill book or in the Combined Training, forgetting that neither can possibly provide for each and every situation that occurs in war. A knowledge of the essential principles may be necessary, but having obtained this we should make up our minds to think and act for ourselves, to think out the problems of modern fighting, to grapple with their difficulties. and devise means to overcome them, to look at every piece of ground we pass over and consider how we would attack it with a section or defend it with a company so as to overwhelm the enemy with a well controlled and intelligently directed fire, how we would assist our comrades on a neighbouring position by a judicious and timely utilisation of flanking and enfilade fire, what we would do if we found our men suddenly being enfiladed from any particular direction, and so on. fact there is no limitation to the many and ever changing little problems that will afford us food for mental thought and consideration if we only apply our minds to them. constantly relying on the drill books our intelligence becomes cramped, our power to act and think for ourselves restricted, and instead of being, as we should be on the day of battle, intelligent and active assistants, we gradually become irresponsible and unreflecting machines incapable of playing our part in a great drama which may decide the fate of our country.

In July 1812, in Spain, two armies, British and French, were each hurrying forward to the river Tormes. It was the prelude to the battle of Salamanca. As the two armies hurried forward, the spectacle is described by an eye-witness as almost unparalleled in war, and yet it will give some idea of the ineffectiveness of the rifles of one hundred years ago. "For there was seen," says Napier, the historian of war, "the hostile columns of infantry at only half a musket-shot from each other (not a hundred yards) marching impetuously

towards a common goal, the officers on each side pointing forwards with their swords, touching their hats and waving their hands in courtesy, while the German cavalry, huge men on huge horses, rode between in a compact body as if to prevent a collision. At times the loud word of command to hasten the march was heard passing from the front to the rear, and now and then the rushing sound of bullets came sweeping over the column, whose violent pace was continually accelerated." What a strange picture this assuredly conjures up in our minds as to how the hostile forces were able to move so close to each other in the days of Wellington's great Imagine a battalion moving along a road with a battalion of the enemy not much more than the length of a barrack room away. The difficulty of loading on the march, the time taken in doing so, and the inaccuracy of the fire-arms carried renders the enemy's shooting so innocuous that the battalion continues stepping out, sometimes forming fours and at other times closing up into column of companies and all within one hundred yards of an enemy who is desirous of capturing every one of us.

Let us now turn to Belgium where three years after the occurrence abovementioned our men again faced the armies of France on the field of Waterloo, and we can gather from one or two incidents how very easy it was to maintain control over batteries and battalions when fighting with small arms that could not shoot very accurately at much more than 200 yards. On the right of the Brussel's road and just in front of the British centre was a farm house which the French had made heroic efforts to capture. Late in the afternoon their bravery and determination reaped their reward and bursting into the garden they chased the defenders from the place. A roar of cheering rang above the din of battle. a moment's hesitation their conquest was turned to the best possible advantage. Their smart red-braided Horse Artillery galloped down the causeway, dragging their guns to the knoll above the sandpit, from which our 95th had been driven,

and, unlimbering, opened fire at sixty yards range on to our line. Had the reader been one of the 95th on that eventful day he would have witnessed what to-day must appear strange indeed, the spectacle of artillery galloping towards him, changing direction at 5 or 600 yards, twisting this way and that as the ground forced it to do so, and eventually halting at a distance of 100 yards, taking no trouble to conceal or protect the horses, but the men merely running or dragging their guns up to a point not more than 60 yards from the low fence behind which he is standing.

The long June day was drawing into evening, and the shadows began to lengthen across the field when Napoleon, the "Emperor of Battles," decided to make his last throw for Empire, by hurling the Imperial and hitherto unconquerable Guard against our lines. In the conflict that ensued our 52nd regiment earned immortal fame. It advanced down the slope with three tremendous cheers. Colborne was leading, and when they got abreast of the enemy's column and only about 300 yards from it he cried—

"Halt! Mark time!"

The men touched in to their left, and regained their dressing. Colborne's horse was shot, and he strode along in front of the battalion on foot, wiping his mouth with a white hand-kerchief, as unconcerned as if he were on Laffan's Plain.

"Right shoulders forward!"

The regiment swings round, and, four deep, faces the Imperial Guard of France on whose efforts the destiny of the greatest soldier of all time depends.

"Forward the 52nd—Charge!" rings out clearly and audibly through the sulphurous canopy and the setting sun, as if to add lustre to the occasion, shines out in a burst of sinking splendour and throws a lurid glare over one of the proudest dramas ever enacted by any regiment of our gallant Army.

Here then, in the one case, we note that in those days of short ranging firearms, the commander of a battery was able to manœuvre and maintain control of his command until he brought his guns into action, within sixty yards of the British line, and in the other we observe the commander of a battalion of British infantry moving his battalion of eight companies by his single word of command within three hundred yards of a force of at least five thousand of the enemy. Mark time, forward, halt, again mark time, right shoulders forward, and so on until his battalion falls on the enemy. Each and all of these are the orders of the battalion commander who retains the battalion reins in his hands until bayonet crosses bayonet and the clamour of the dreadful conflict drowns his voice.

The year 1854 found our men, in conjunction with the soldiers of France, engaged in a struggle with the armies of Russia. Forty years had clapsed since Europe found relief, after 22 years of bloody and almost uninterrupted conflict, from the tyranny of Napoleon. During this period the nations of Europe, with perhaps the exception of Germany, took little or no interest in military matters, and the battle of Alma was fought largely in the formations of the Peninsula days,-the Russians manœuvring in large and unwieldy columns and our troops fighting in line two deep and shoulder to shoulder just as Wellington had taught them. The Russians with the exception of a few hundred men, still used the smooth bore musket but the French and British were largely armed with rifles. These rifles were not very much more effective than the smooth-bores, nor were our men trained to shoot at much more than 50 and 100 yards, and then with only 5 rounds annually at each of these ranges. Fire was not vet considered the sole factor on the battle-field and the battalion commanders insisted on maintaining control of their battalions until the actual bayonet charge took place. as the Russians were concerned—who at the Alma were acting on the defensive and who kept their regiments massed in solid squares-it was easy enough to move the battalion as a whole even in close proximity to the opposing lines.

our men, who for forty years had been trained almost exclusively on the barrack squares of Great Britain, found that the offensive, and the obstacles such as the river Alma, the vineyards and burning houses, rudely interfered with the rigid battalion lines and sadly disconcerted many of our commanding officers, who saw victory only in the wonted array, the perfect alignment, and the capacity of their battalions to act solely on their word of command.

During the course of the battle, however, there were not wanting signs that under certain circumstances control of large bodies, fighting in line such as our men did, may no longer be possible and may in fact have to be resigned to subordinate leaders. When the 7th Fusiliers crossed the river, Lacy Yea, their commanding officer, "had not time to put them in their wonted array, for the enemy's column was so near that forthwith and at the instant it was necessary to ply it with fire, but what man could do, he did. very shoulders so laboured and strove with the might of his desire to form line, that the curt red-shell jacket he wore was as though it were a world too scant for the strength of the man and the passion that raged within him, but when he turned, his dark eyes yielded fire, and all the while from his deep-chiselled, merciless lips, there pealed the thunder of imprecation and command. Wherever the men had got clustered together, there-fiercely coming-he wedged his cob into the thick of the crowd and by dint of will tore it asunder. Though he could not form an even array, yet he disentangled the thickest clusters of the soldiery, and forced the men to open out into a lengthened chain approaching to line formation. Numbers of the Fusiliers were wanting, and, on the other hand, there were mingled with the battalion many of the soldiers of other regiments. With a force in this state, Yea was not in a condition to attempt a charge or any other combined movement. All he could hope to be able to do was to keep his people firm on their ground, to hinder them from contracting their front or gathering into heavy clusters, and then leave every man to make the best use of this rifle."

But such cases as the one quoted were exceptional in those days of close formations, and, as a rule, the battalions halted, dressed by the left or right, advanced, marked time, and advanced again, just as they did at Waterloo, and this mechanical precision combined with the capacity of a commanding officer to keep it up to the last moment was the measure by which the standard of efficiency of both his regiment and himself was guaged. It was the proud prerogative of our commanding officers to maintain that they could repeat the clock-work precision of the parade ground even when within 200 yards of the enemy, and after the war, the few who began to foresee the effect of modern fire and even went so far as to advocate a slight division of responsibility in the field, were effectively silenced by the unanimous wail of every senior officer in the Army who saw in such Utopian dreams the end of all true discipline, and who considered such a vailing of their dignity as too great a concession to be even thought of and much less discussed. gradual improvement in rifles, the increased muzzle velocity, the increased range and the improvements for facilitating loading, slowly yet surely forced those responsible for the training and efficiency of armies to recognise that a change was coming over the spirit and form of modern battles.

Fourteen years after the conclusion of the Crimean War the armies of France and Germany were engaged in mortal combat, and on the slopes of St. Privat the modern rifle asserted itself and the curtain was rung down on many of the archaic ideas that still prevailed in our Army. That battalions could manœuvre under fire; that officers could ride among their men within 200 yards of the enemy's lines; that battalions could be directed solely by battalion commanders; and that battalion control, the prerogative of our Crimean colonels, could still be retained; these and many other relics of the barrack square were swept away and condemned to the oblivion

of the past by the riflemen who fought for France at St. "So the word was given for the leading divisions of the Guard," says Atteridge, "15,000 strong, the picked soldiers of all Prussia, the men who had broken the Austrian centre at Sadowa, to advance to the attack. On they went, drums beating, battle flags waving in the sultry air, their generals and field officers mounted, at the heads of brigades and regiments. General von Pape's division marched on the left of the St. Privat road, General von Budritzki's on the right to the south of it, each in its massive column of half battalions; and as they moved out, they looked not as if they were on a fire-swept battle field, but as if they were drawn up for some grand parade under the eyes of the king, on the dusty Tempelhof Platz at Berlin. Before them, with gentle unbroken slope, a mile and a half of broken ground rose up towards the hill-top where St. Privat just showed its first houses and its church tower above the crest. The popular avenue of the high road linked it with Ste. Marie. had been of late only a dropping fire from the village, but now from the houses and the hilltop came the sharp volleys of the chassepot, and a rain of lead began to patter on the sunburnt slope. But as yet the range was too long to do much damage. Then the leading companies broke into lines of skirmishers, replying to the French volleys, while the columns pressed on behind them, continually reinforcing them. But as the range lessened, the chassepot fire from the crest rose into a wild storm, the levelled rifles pouring out their bullets, as fast as deft hands could work levers and triggers. The Guardsmen were falling fast. In a few minutes all the mounted officers were down, of the Jager battalion which led the left attack seventeen officers had fallen, and a young ensign found himself in command of his handful of riflemen that were still marching onward. Forward! Forward! range out the voices of the leaders, as with waving swords they moved in front of their men, and dropped one by one. there were only 600 yards to the crest, but here the Guards

were going down like grass before a scythe. They could advance no further, but they would not go back. They lay down and replied to the fire of the defenders. Many of them never rose again. Along that terrible hill-side there stretched before long a broad belt of dead, wounded, and dying, piled up in places three and four deep. Of the 15,000 who advanced to the attack, 4,500 were struck down. It was an heroic failure, and it taught the lesson that against the modern rifle even the best infantry could no longer advance in the massive columns that had decided the fate of many a European battle-field."

I have nothing to do with the battle as an example of anything that appertains to tactics. It enables me to say, however, that under modern fire well directed there is no room for mounted officers; that officers on foot who expose themselves unnecessarily will soon cease to exist to lead their men; that a battalion whose officers do not recognise these facts will be without leaders, and that consequently a larger responsibility than hitherto will devolve on even the commanders of squads and sections. It was some years, however, before these palpable truths received official recognition in our drill regulations, and even when they did the failure to realise the importance of the principles involved, or the natural dislike to delegate to juniors the duties and responsibilities which had hitherto remained in the hands of seniors, militated against any real application of the rules inculcated in the drill books

In a few regiments which showed clearly their superiority in South Africa the rules laid down bore fruit but they never permeated the Army as a whole, and only lately, that is, nearly three years after the conclusion of the Peace of Vereneging, the Commander-in-Chief in India has found it necessary to direct in unmistakable terms that from generals to corporals there must be no encroachment on the responsibilities of leaders. But the war in South Africa went further than the experiences of the Germans at St. Privat. It

confirmed what I have already said as to the enormous death roll among officers which the modern rifle compiles and the impossibility of officers leading and controlling large units as at Waterloo and the Alma. It clearly indicated that even when officers are dressed like their men, and like their men take advantage of cover, the stress of modern battle, the hail of projectiles, and the wide extensions necessary renders it next to impossible for officers to control more than a few men in their immediate vicinity.

Referring to the gallant attempts to drive the Boers from Wagon Hill the Times History of the War says, "The reinforcement was the signal for a renewed outburst of fire, and casualities began to come thick and fast. Edwards was hit in two places, and the command passed to Karri Davies. who was put out of action not long after while inspecting the situation on Wagon Point. Codrington started to lead a rush against the crest in order to stop the deadly shortrange fire, but his orders were unheard in the din of firing and only one man followed him. A few yards from cover The attempt was, by Hamilton's orders, he fell wounded. renewed repeatedly upon the arrival at 7 a.m. of Major W. P. Campbell with the reinforcing companies of the 6oth. With a handful of men Major Mackworth attempted the task. His following were swept back and he himself met a soldier's death. Lieutenant Raikes fell in an equally fruitless charge. Lieutenant Tod gallantly led a third rush into the open. Before they got three yards from cover he was shot dead and seven of the twelve men who followed were hit. heroism of the officers was unavailing to induce the men to face the deadly fire across the few yards of open between them and the enemy. On the left Major Bowen, with eight men, tried to work round the Boer right under the southern crest, but he and most of his men were killed."

And again referring to the attack of the Gordons and Manchesters at Elandslaagte on October 21st, 1899, the same writer says, "And when the dip was passed what a task

lay before them! They were called to face half a mile of rough, rock-strewn open, sloping upwards like a glacis, full of the enemy's sharp shooters, and intersected at intervals with barbed wire fences. The far summit commanded it from end to end as a butt would command a rifle range. enemy was visible, but all could feel that the final kopje was Stumbling forward among the alive with small-bore rifles. stones, blundering over the bodies of their comrades as they fell before them, the men pressed on. It had ceased to be a moment for regimental commanders. Even sections could scarcely keep together; it was the sheer courage of the individual alone which carried the line on. Men stopped, lay under stones and fired, were shot as they lay, or rose from cover to rush another dozen yards."

The Japanese struggle for freedom in the Far East is replete with examples and incidents which show how modern fire has restricted the possibilities of superior commanders being able to retain the control of even companies in action at decisive or perhaps effective ranges. At Liao-yang the 34th Japanese regiment lost all its officers, one regiment was eventually commanded by a corporal, and the command of companies in finally another fell to the private soldiers in the ranks. The Iapanese in finally being forced to approach positions almost exclusively Russians in by night, and the laying down the rule that "the section leader need not precede the men in the rushes; he may give the order to advance and go with his men, not in front of them," show that the fiery ordeal of modern war has instilled into them the importance of saving even the most junior leaders on whose efficiency and capability great decisions may depend.

As I have already stated a few of our battalions, and only a few, by their actions in the first two or three fights they were engaged in, showed that their commanding officers and adjutants were fully alive to the conditions of present day warfare. They had constantly borne in mind and practically

and persistently applied the principles inculcated in the Infantry Drill book in use before the war, wherein it was laid down that, "Commanders of all ranks, from generals to section commanders, must carefully bear in mind that in war it is impossible for them to exercise over their commands the same personal control that finds place at drill exercises. Delegation of command is a necessity, and commanders must, therefore, take every opportunity of training their subordinates in accepting responsibility for departures from, or variations in, the mode of carrying out orders or directions originally given, impressing on them at the same time that such departures or variations must always be justified by the circum-The conditions of modern warfare render stances of the case it imperative that all ranks should be taught to think, and, subject to general instructions and accepted principles, to act for themselves." In the very few regiments in which these principles had, by the energy and foresight of their commanding officers, taking firm root, the marked characteristics of their fighting were that company commanders, provided they clearly understood the general object of the operation, almost invariably did the right thing when left to themselves; that when disabled their half company commanders continued to operate on the same lines; that in the absence of their half-company commanders the section leaders at once rose to the occasion, and that even the squad leaders were capable of exercising sound judgment, and of devising means to overcome unexpected difficulties without continually asking for orders.

But these regiments were few and far between and the great majority suffered severe losses and compromised their hitherto unequalled and unsullied reputations before they detected the finger posts that point the way to victory. They still believed that firing lines at close ranges would remain under the control of their company and even battalion commanders; that wheeling or changing direction was still possible under fire; that supports could march forward without

let or hindrance to within 500 or 600 yards of the enemy's position; that officers would be able to command over wide areas and that the men had nothing else to do but to move, halt, lie down, and fire volleys, at the sound of their company commander's voice. They did not understand, or they refused to admit, that under the hail of some hundreds of thousands of bullets, fired by an unseen enemy, the leaders must fight with the men, must advance with them, lie down with them, take cover with them, and that the section and squad leaders and even the individual soldier in the ranks must be left to fight each for his own hand, selecting his own line of advance, deciding the ranges, firing at what he considers the best objective, utilising the ground according to his individual judgment, and expending his ammunition as he thinks fit. psychology of the breech-loader battlefield had studied and the changed conditions brought about by smokeless powder and concealment had not been realised. still believed that, as on the manœuvre ground, a constant and uninterrupted stream of orders could reach the company commanders; that men could carry messages from the front to the rear and from one flank of the firing line to the other; that signallers could stand up and send a flag message without inconvenience; and, relying on the normal procedure of the training ground, on stereotyped methods of working, on mechanical perfection and hard-and-fast rules, which ensured uniformity of movement and that regularity of attack which affords pleasure to the spectator and satisfaction to the unpractical critic, they stepped proudly forth into the arena of war to vindicate Britain's name on the field of battle.

### CHAPTER IV.

As shown in the previous chapter the gradual improvement of the rifle has brought about a corresponding decrease in the number of troops that can be controlled by any one man at effective and decisive ranges. Whether we like it or not we must recognise this fact and shape our training accordingly. On the battle field of the present day the regular lines of the parade ground have disappeared; the company, even if the company commander knows where it is, is broken up into groups and sections, some lying where the ground favours them, others crawling on their stomachs in ones and twos; some groups have been left hopelessly in the rear and have got mixed up in the supports, others from the supports have, without permission, gradually edged their way up to the firing line. In such cases it requires no demonstration to show that a great deal must be left to the non-commissioned officers and men. And whether it be in the attack or the defence of a position, in a retreat or an advance under fire, in a rear or in an advanced guard action, on the outpost or in the skirmishing line, our success, whether as battalion, company, or squadron commanders will depend entirely on the manner in which our subordinates, whether in our immediate vicinity or when far from our control, carry out what they know would be our ideas if we were present. has long passed away when commanders of any grade should be permitted to account their failures as due to the defects of their subordinates, and those generals and the higher staff who understand and appreciate at its true value the efforts recently made by the Commander-in-Chief in India to make officers, from divisional generals to squadron, company, and battery commanders immediately responsible for the training

and efficiency of their troops, will no longer tolerate the expression "I have been let in by my subordinates," which is so frequently made use of to explain away incompetency and faulty training. By no such subterfuge as this should an officer of any rank be allowed to cloak his own incapacity and incompetency. I quite recognise the difficulties company and squadron commanders have to contend with: the men on furlough, the section and troop leaders employed on various odd jobs, and the men on guards and orderly duty. are indubitably difficulties such as a foreign officer may not have to contend with, but they are necessitated by the peculiarities of our service, and as a set off to the foreign officer it must be remembered that while he has his men for three or even two years only we have ours in the British service for seven or eight and in the Native Army for twenty-one In any case I appeal to officers of every grade to divorce from their minds once and for all the inclination at present in evidence at every field day to say that their subordinates have let them in. If one of the section leaders fails to seize an important knoll, or fails to intelligently cooperate in any way, do not fear to accept the sole responsibility and admit the fact as evidence of his inefficient training. Do not also seek shelter behind the statement that the class from which the men are enlisted does not produce that substratum of intellect without which intelligent co-operation and spontancity of effort is impossible. The fact is there has been no honest attempt to encourage either the British or Indian soldier to think and act for himself; there has been all along the line a too much of the telling the men what to do instead of asking them how they would do it if left to themselves. endeavour to free ourselves from all those who think that if the "I order; you obey" plank is removed the whole fabric will fall to pieces. It is the officers of this school who have retarded the advance of the British Army on intelligent lines and it is the same class of officers who have made and continue to make the Native Army the "unthinking bayonet"

If our British soldiers have been belittled on this score what can we think of the Native Army in which a man picks up and puts down his grooming brush by order, in which the whole military bureaucracy from Lance Naiks to Colonels walk up and down stables for an hour daily to ensure a simple and practical thing like grooming a horse being carried out "to order"; and in which both in camp and in the field not a single thing, even of the most childish nature, is undertaken by officers and men who have grown grey in the service, except by order. Incapable of independent action, afraid of even the most childish responsibility, absolutely ignorant of what is meant by intelligent co-operation, the Native Army has yet to go through its hour of tribulation. It is a lamentable state of affairs, yet nevertheless a true one, and notwithstanding the principles inculcated in all our manuals, and the constant publication of Army Orders urging a judicious devolution of authority, and pointing out the right lines on which subordinates and even the rank and file should be trained, little real progress is apparent, chiefly because commanding and other officers find the "I order; you obey" system, both in camp and field, relieves them of an immense amount of labour and trouble. They forget that intellect and education play a far greater part in war than blind obedience; that a man who for twenty years has been an automaton cannot be made an intelligent co-adjutor on the field of battle, and they look on complacently while the veterans of Russia are subjected to repeated ignominy and defeat by an intelligent and educated army. The Germans in 1866 hammered the Austrians and with every blow the sound came forth "The intelligent soldier will every time aefeat an ignorant veteran." But the world went merrily on and four years later they picked up the armies of France and dashed them to pieces on the rock of ignorance. To-day Russia, for many decades the bug-bear of Christendom, is learning at an appalling cost that the properly trained subordinate of Japan, capable of self-sacrifice and unstinted devotion to his country, and the

half a million "thinking bayonets" under the flag of the Mikado are not only more than a match for, but laugh to scorn, the dissolute and self-seeking officers and the millions of ignorant and unthinking soldiers under the Russian eagles.

Before therefore we have a right to expect that our squadron or company will do credit to our training in whatever situation it is placed, we must make certain that our half company, section, and squad leaders have been intelligently It is on the ability, the resolution, and the skill of our subordinates that we must rely for success in the field. When they become habituated to accept responsibility and are encouraged to show their worth we will gradually begin to rely on them to do the right thing in whatever situation they may find themselves. A feeling of mutual confidence, which is the keystone of all common sense and practical training, will soon become evident, and our subordinates, encouraged by the confidence placed in them, will well repay our trust on the day of trial. They will be keen and intelligent assistants capable not only of carrying out our orders and instructions to the letter but of anticipating our wishes and promoting the work in hand. They will, when the occasion arises, think and act for themselves and we shall be relieved of that constant and wearying anxiety as to what is being done in our absence. Let me give an example of how the New Zealanders under my command in South Africa showed, without any drill-book training whatever, that they were capable of relieving their officers of a great deal of petty They were all intelligent men who were capable of exercising their wits, imbued with an independent spirit and with a strong belief in their own abilities. Every evening a number of them were detailed for duty on the outpost line. I formed them up in column of posts and pointed out to them the frontage of a mile or two miles they had to occupy. That was all I did. They marched off and posted them-On a few occasions I went round to see the line they had taken up. It was always the best that the ground

nermitted of. They, of their own initiative, established communication with the neighbouring posts and were always in touch with the Mounted Infantry or Australian posts on their flanks. When it is remembered that with our men for a hundred years it has been categorically laid down that we should, metaphorically speaking, carry each soldier to his post and place him on it, tell him his front, his flanks, his rear, where his piquet is which he has just left and the road he must go to get to it, where the posts on his right and left are which he has seen posted, what to do in case of alarm, the number of his post, the number of his piquet and a host of other details which would at once occur to any human being if only encouraged to think for himself, it will easily be realised what a revelation to many of our officers and soldiers the intelligent co-operation, common sense, and initiative of our Colonial soldiers was. And yet but few British officers have adequately realised or appraised at its true worth the possibilities and advantages of an educated army in which not only the subordinate leaders but the rank and file make use of and display their intelligence in assisting Von Moltke writing of the battles before their leaders. Metz says:-" The self-dependence of the subordinate commanders, so thoroughly inculcated by the peace manœuvres, in conjunction with a well-grounded training of the individual, here asserted themselves with all their advantages."

Those responsible for the contents of our "Infantry Training" are fully alive to the importance of intelligent leadership in even the most junior ranks. In referring to the sub-division of the company into half companies, sections, and squads, which are now permanent organisations, they hope to attain the following ideals:—

"The men," they say, "will thus acquire the spirit of true comradeship, and learn to repose confidence in each other; while the non-commissioned officers will be accustomed to command, and to act when necessary on their own judgment. By such means the fighting value of the company will be fully

developed; and its proper direction and command under hostile fire, when superior control becomes impossible, be maintained."

Many officers and non-commissioned officers have, I daresay, read these sentences often, but what I am afraid of is that they have not realised their importance and their possi-What I have heard many, both in the British and Indian service say is, we have adopted the squad and section organisation and everything is going allright. From what I have already said I hope it will be clear that the adopting of the organisation is only the stepping stone to what the drill regulations have in view. I hear the reader saying what is the standard I am to aim at in this devolution of authority and production of zealous and intelligent assistants. Not being an infantry-man, I am afraid to set up a standard for the infantry, but I offer the following questions which are equally applicable to the cavalry and which I suggest the squadron commander should ask or frequently during his company or squadron training and also at odd times throughout the year. If he can answer them all satisfactorily, he may be afraid of generals and staff officers, but he need be afraid of no campaign.

- When my company is extended either on the defensive or in the attack is inter-communication intelligently and unremittingly carried out?
- 2. Do my section and squad commanders promptly and intelligently pass me all information, such as location of enemy, approach of other units, or anything else which it is of importance for the whole company to know?
- 3. Do they report casualties, state of ammunition, progress and position of their commands?
- 4. Do they thoroughly understand and practically apply the system of mutual fire support, without waiting for orders?
- 5. Do they employ flanking or enfllade fire to promote

- the advance of neighbouring groups?
- 6. Do they, of their own volition, seize every opportunity of enfilading or bringing a flanking fire to bear on the enemy's troops?
- 7. Do they always do what they know I would have ordered them to do had I been present?
- 8. Do they anticipate orders?
- Gan they grasp at once my orders and instructions, so as to obviate the necessity of continual interference on my part?
- 10. Do they make an intelligent use of ground and cover, and adopt their formations to it?
- 11. Do they as long as possible control the fire of their men?
- 12. When left to themselves do they invariably do the right thing?
- 13. Are they self-dependent?
- 14. Are they resourceful?
- 15. Do they use their wits?
- 16. Do they think and act for themselves?
- 17. Can they improvise means to overcome difficulties?
- 18. When the unexpected happens do they keep cool and do the best thing to be done under the circumstances?
- 19. Do they see that their men intelligently improvise cover?
- 20. When I pass along the word "company commander shot," do they go on striving to attain the object in view?
- 21. Do they readily and intelligently assume responsibility?
- 22. Do they understand and intelligently use the different kinds of fire?
- 23. Can they make short and perfectly clear reports describing the position, distance, direction, and probable strength of any point on which they

- have located the enemy whose fire is causing them loss?
- 24. Do they observe the effect of the fire of their squads and sections?

These are some of the questions I would suggest a company or squadron commander asking himself if he wishes to arrive at a conclusion regarding the tactical training of his squadron and company subordinates.

To an officer who is desirous of improving the musketry efficiency of his company, section, or squad, there is nothing more interesting than that afforded by a perusal of the different reports regarding the musketry training of the Army that have been issued yearly by the Adjutant They give at once a clear and succinct account of the efforts made during the last seventeen years to improve the fighting efficiency of our regiments. They indicate the lines along which improvement has been continuous and they direct attention almost yearly to the stumbling blocks in the path of progress. There is one thing which I think even the most casual perusal brings to light, and that is the constant repetition of faults, and the repeated reiteration of palpable truths. I cannot help thinking that this discloses a somewhat unsatisfactory state of affairs especially in our Native Army where men pass half their lives with the colours. There may be some excuse for the British regiments which come out to this country practically new to the conditions of Indian service. I do not admit, however, that such an excuse The general principles on is either a valid or a sound one. which any system of training depends should be practically all over the Empire, and it is wrong to have to tolerate any deterioration in the training on the grounds that a regiment has just come from abroad, or has been serving under a general with ideas peculiar to himself as to how a regiment should be trained for war. The fact of the matter is that these annual reports, containing as they do the confirmed opinions of musketry experts of

known and recognised ability, are but seldom read. Like many other useful and instructive documents bearing on the training of the Army, they find an early grave in the musty archives of the orderly room or staff office. If they are read it often is in a perfunctory manner; the ideas and the governing principles inculcated are neither instilled into all ranks nor is their importance realised, or the efforts and labour spent in compiling them appreciated. This has been, I fear, the fate of most of the Annual Musketry Memorandums issued by our Adjutant General. If it were not so, I cannot conceive the same mistakes attaining such proportions year after year. In a short service Army, such as that of France or Germany, where the men are completely changed every two or three years, it is quite conceivable that the mistakes of former years will repeat themselves. But in the Indian Army where officers, non-commissioned officers and men serve together without a break for ten, fifteen, or twenty years, the repetition year after year of the same faults and shortcomings clearly evinces, as stated above, a disregard of the instructions annually issued, or an absence of intelligent interest and concentrated effort to attain the desired standard of efficiency. For example, the failure to pass orders along a line of skirmishers is brought to notice in almost every report for the last two decades, a defect which could have been remedied in a week throughout the whole Army had battalion and company commanders given the subject any attention at battalion and company training. Again, it was brought to notice in 1888 that when the men come within effective range the control must devolve on subordinate leaders, and yet ten years after we are told that battalion commanders are found placing themselves in the firing line and endeavouring to regulate everything themselves. Lord Roberts issued his famous memorandum nearly twenty years ago which gave the primary impetus to the musketry training of our Army. In this he pointed out the necessity of encouraging subordinate leaders to assume responsibility and to act on their own initiative, and this principle, the founda tion of all efficiency, has been repeated almost yearly. in the report for 1904 we find "Subordinate leaders are ofter not allowed to act on their own initiative, looking to superior officers for orders and losing valuable chances." Notwithstanding repeated and urgent warnings as to the allimportant advantages to be derived from a sound and intelligent utilisation of flanking and oblique fire, our Army, as whole, continued at all our field days and peace manœuvres to fire straight to the front, and officers of al ranks, with a few noted exceptions, found their men disheartened and discouraged when face to face with the superior and common sense methods of the Boers. For years it was religiously preached and pointed out with unerring regularity that the long-ranging rifle placed in the hands of the attackers the means of developing an overwhelming concentric fire against selected points of the defence from a widely extended front, and yet there is scarcely a battle from Talana to Diamond Hill in which this particular respect the initiative was not left to the enemy. Do not, I repeat, be led away by those who decry and belittle the lessons to be learned from our own bitter experiences. Give no heed to those who enlarge on the abnormal conditions under which the campaigr in South Africa was conducted, but zealously and honestly continue to train the men on the lines indicated in the training manuals and these annual reports. Each annua report issued from Army Head Quarters is like the beacor light on the Goodwin sands, warning us of the shoals and quicksands by which we are surrounded if we continue to steer the course of indifference and apathy. Each battle from Talana to Diamond Hill is pregnant with lessons in the tactical use of the rifle, and clearly indicates the mischievous and even painful awakening in store for those who, in their self-glorification and complacency, refuse to see the writing on the wall. If I bring to notice at this stage the defects the correction of which has been so constantly urged during

the last decade, it is with the object of indicating the direction in which our best efforts should be directed if we are to attain high standard of musketry efficiency. With constantly before him a company or squadron commander will be able to check their continuance in his company or squadron, and he should make it a point of honour to see that the mistakes brought to notice in one year are not permitted to repeat themselves in the next. It is only by such means that constant and continuous progress on the road to efficiency can be maintained. Do not think for one moment squadron, company, section, and squad commanders, that little responsibility lies upon your shoulders. On the contrary the whole fabric of our military training rests for its stability on the thorough, efficient and practical instruction imparted to small units, and it is to you as much as to battalion and brigade commanders that we must look for increased efficiency throughout the whole Army. The following are the weak points which have from time to time been brought to notice:-

### LEADERS-

- (1) Unnecessary delay in opening fire, due probably to officers and non-commissioned officers not being able to make up their minds what they have to do.
- (2) In many regiments formations are much too rigid, and Native officers, and non-commissioned officers particularly, do not like any initiative on the part of the men, but try to keep them strictly under their own control.
- (3) Extended formations are practised, but generally in a very mechanical way, and officers, especially Native officers, seem afraid to let sections or groups get away from them.
  - (4) The fire-unit commanders of the various grades are not impressed with the necessity of considering the quantity and rate of fire that may be required to attain certain results in the various situations in which they may find themselves during an engagement.

- (5) There was frequently a considerable want of initiative among the company officers and non-commissioned officers.
- (6) Little or no attempts are made by officers to note the lie of the ground and the cover it gives before moving their men off to the attack.
- (7) Company commanders did not act sufficiently on their own responsibility.
- (8) Sufficient time is not always given to the troops told off to the flank attack to get into position so as to co-operate opportunely with the frontal attack.
- (9) In field firing, commanders neglect to rehearse the operations, with or without blank, so as to prevent avoidable mistakes being made.
- (10) The tendency of senior officers to go into the firingline instead of controlling the fight from the rear was observed.
- (11) Company and section commanders are not allowed to take their fair share of the work and responsibility.
- (12) The manipulation of large masses of infantry fire is rarely practised by senior officers.
- (13) The designation of objectives is imperfectly done.
- (14) The various commanders of a force, of the different sections of the firing line, and of the companies in each part of the firing line, rarely explain clearly and efficiently their wishes to those under them as to what should be done or what should be fired at.
- (15) The training of non-commissioned officers is a very important part of the officers' duty which is not always systematically attended to:
- (16) Although the standard of book knowledge among non-commissioned officers is high, its practical application is rare in many units.
- (17) The musketry drills, firing exercises, aiming drill,

- and control of fire drills, are generally conducted in a far too stereotyped way, and are not made sufficiently instructive, practical, or progressive.
- (18) Subordinate leaders are often not allowed to act on their own initiative, looking to superior officers for orders and losing valuable chances.
- (19) Leaders are particularly careless in the matter of taking cover; they, ammunition mules and ammunition carriers, being frequently the most visible portion of an attacking force from the defenders' position.
- (20) Casualties among leaders must be more frequently practised than they are now to give all ranks the opportunity of learning to assume the duties and responsibilities of their superiors.

## DEFECTS IN JUDGING DISTANCE-

- (1) Judging distance is the weakest spot in the musketry training of the troops.
- (2) The judging distance was frequently very wrong. On one occasion 1,350 yards was estimated at 700 yards, 850 yards as 600 yards, and 650 yards as 380 yards.
- (3) The men are not always taught to judge distance as well as the leaders.
- (4) Range taking practices are done too frequently on the barrack square, and there is no endeavour to liken the work to service conditions.
- (5) Mekometers are often used at too close range.
- (6) Special parades for judging distance are too often made use of, instead of the judging distance being constantly worked into the field work.
- (7) Not sufficient attention is paid to finding the range with trial shots or volleys.

# DEFECTS IN THE FIELD FIRING-

(1) The sights are not always altered as the ranges increase or decrease.

- (2) The objective is frequently indicated as "at the enemy in front" which is vague and misleading.
- (3) Cover is not intelligently made use of, and men are frequently halted in open places instead of being hurried across them in a body, or in ones and twos.
- (4) There is too much sky-line exposure.
- (5) There is too great a tendency to hurry men over bad ground, which causes them to become scattered, and brings about unnecessary loss of control over them for the time being.
- (6) Troops are called on to charge a position before being collected in sufficient strength to do so successfully.
- (7) Before each rush forward the next point to make for is not carefully considered, which results in unnecessary exposure and the masking of the fire of other sections in rear.
- (8) Fire is opened at too long ranges.
- (9) The men do not realise what quantity of ammuni tion they may be expected to expend in attacking an entrenched force.
- (10) In firing from behind cover men get themselves into impossible positions and expose themselves unnecessarily.
- (11) The attack of a position is too exclusively practised.
- (12) Concentration of fire does not receive sufficient attention.
- (13) Supports and reserves do not utilise the ground to cover and assist the advance of the troops in front.
- (14) All ranks do not intelligently watch the effect of their fire.
- (15) There is too much crowding in the trenches.
- (16) Signalling between units is defective.
- (17) Want of co-operation by fire between bodies of troops.

- (18) Failure to pass orders along the front.
- (19) More individual instruction in the field work is required.
- (20) Sufficient use is not made of marksmen. They, and bad shots, are mixed up together, and fire indiscriminately.
- (21) Our men, and especially the Native soldiers, are too slow with their fire, and often lose their chance of a shot.
- (22) All ranks are not sufficiently trained to recognise the effect of fire on troops in different formations at different ranges.
- (23) Scouts indulge in shooting instead of observing.
- (24) Units do not act on their own initiative but constantly wait for orders.
- (25) Reinforcements are badly brought up.
- (26) Retirements are not well carried out.
- (27) The importance of mutual support by cross-fire during an advance or retirement, and the value of oblique fire generally is not fully realised.
- (28) The relative importance of objectives is not correctly appreciated.
- (29) The men do not know sufficient about the work in hand or the object in view.
- (30) Extended lines are often seen using volleys.
- (31) Men and officers are often seen standing up within 400 or 500 yards of the enemy's position.
- (32) Individual instruction does not receive sufficient attention.
- (33) The supply of reserve ammunition hardly receives sufficient attention, and when the mules are used they are not intelligently handled.
- (34) Instruction in the use of entrenchments, or rapidly constructed cover, in the attack as well as on the defensive, is not as general as it should be.
- (35) The spade and the rifle should be inseparable, and

- yet, in all the many schemes carried out, entrenching tools were hardly ever taken out.
- (36) Most of the field firing schemes take the form of fire to the front but it must be remembered that flanking fire has a great moral effect on the men exposed to it.
- (37) The men are not well placed in defensive positions, to ensure the fullest effect from their rifle fire.

### CHAPTER V.

From what has been said in the last chapter I think it must be clear to every officer in the Army that, as far as those in high places are concerned, their musketry interests have not been neglected; the lessons of modern wars have not been overlooked; the dim vista of the future has been peered into, and with a prescience in many cases remarkable, the effect of modern rifle fire has been foretold. reports should be in the hands of every company, squadron, section, and squad commander, and when companies or squads are handed over to them for their annual training, and during the conduct of field practices, they should make it their business to see that every line in the previous year's report is thoroughly mastered by all ranks. As I have already pointed out the one remarkable feature about these reports is the attention drawn to the same errors in training which apparently repeat themselves year after year. of the matter is that officers do not understand or appreciate the object of these reports. They appear to think they are circulated to be read, and like many other official reports, condemned to the office pigeon holes. The result is that the training of our men if continuous is not progressive. efforts are directed in the wrong direction, and all ranks are wearied and bored to death by the ever recurring sameness of the work. The instruction becomes dull and uninteresting. There is little life in it and less reality.

An officer who takes an interest in the musketry training of his men will soon find what is most important for him to bear in mind, viz., that little or no progress can be made in the practical musketry training of his men as long as he confines his efforts to the regimental parade ground. He

must go far afield into the bush and scrub, among the hills and valleys, and along the river beds and nullahs, for it is there, and there only, that battles are fought. I do not wish to be misunderstood. The parade ground has its usefulness It is there that the men must be taught the principles of fire control and discipline for these cannot be taught when ball firing begins. It is there that the subordinate leaders learn the correct words of command and the use of the It is there that the men learn to use the range finder and acquire skill and steadiness in the use of their rifles. is on the parade ground that all ranks are impressed with the means necessary to ensure concentration of fire, and the switching on and off of fire on different objectives, and it is there, and there alone, that the eternal principles of co-operation and mutual support are engrained into all ranks. all training on the barrack square will be useless, and as it often is now, dull and monotonous, if the company or squadron commander does not clearly understand and make it perfectly clear to all under his command that the parade ground work is only the stepping stone, the jumping off place, as it were, for the practical work in the field. If he does not do this, his men will go through the work perfunctorily; they may be smart but their work will be mechanical, and smartness and precision will assume an importance out of all proportion to their requirements. Their interest will not be aroused and their intellect, instead of being sharpened by being encouraged to appreciate the object in view, will become The non-commissioned officers and deadened from disuse. men of the British Army are not such dunderheads as they are often taken to be, and they soon realise that the actual conditions of warfare are either disregarded or do not play a part in their training. When once the men think this a commander's task is a hopeless one and he would better conserve the interests of the State and further the welfare of the Army by entrusting it to abler hands. Do not imagine for a moment that I am making much ado about nothing, for

every day I see evidence of the inability of officers to keep the parade ground work in its proper place, or of dilatoriness, and lack of interest, which finds the barrack square a more congenial resort than the hills and valleys. I see non-commissioned officers of many years service for the hundredth time standing up on the barrack square ranging with the mekometer on the butt flag staff. I see companies doing outpost duties with their piquets and supports almost in the barrack rooms. I see soldiers who have fought in Tirah and South Africa daily judging distance on the company cookhouses or the corner of the officers' mess. I see squadrons reconnoitring for an enemy within the boundary pillars of a cantonment, and batteries practising rear-guard actions in the vicinity of their riding schools, and were it not for the prohibition which bullets place upon it, I should be quite prepared to see companies practising field firing with ball from behind the fences of the regimental garden. such circumstances, it is little wonder then that the same mischievous errors and faulty training repeats itself year Although our Army is small in comparison with those maintained by Germany and France, the great number of campaigns we participate in, the varied experiences of our officers, the different conditions of climate and terrain that have presented themselves, and the lessons in adaptability and resourcefulness acquired, all combine to place at our disposal the material and means by which our small Army can, and should, be made the most efficient in the world. only by utilising the advantages conferred, by relegating the parade ground to its proper place, by restricting the training there to its proper sphere and not allowing it to attain any undue prominence that we can hope to attain the highest ideals of musketry efficiency.

The same remarks apply to the rifle range. Up to quite recently the musketry training of all ranks was confined almost exclusively to the rifle range. It was not realised that it, like the parade ground, is only the means to an end

and not the end itself, in fact that it is only a convenient arrangement for enabling squadron and company commanders to satisfy themselves that their men can shoot with accuracy The training of the soldier in the tacat known distances. tical employment of his rifle in war has for its object the infliction of loss or demoralisation on the enemy in the quickest possible time and by the most direct methods. But before the men can do this, their commander must be certain that, provided the range is given and the objective clearly indicated, they can hit the point he desires them to shoot at. The rifle range enables him to do this but no more, and it must not be imagined for one moment that because the men of a company can make bulls-eyes at known distances, on level ground, and at a stationary and prominent object like a six feet square canvas target, they will be able to drive a determined enemy out of a position or cause him such losses in his advance to the attack that he will promptly give up Do not again misunderstand me. of the rifle range, like the parade-ground, for all it is worth. Whilst there make sure that the men are accustomed to watch the strike of their shots, to alter their backsight elevation according to whether the shot goes high or low, and that they can make due allowance for wind. Do not allow the non-commissioned officers to do these things for them, and, above all, do not sacrifice the practical utility of the work in the endeavour to show a higher figure of merit or to Make the practical training of getting more marksmen. your men for war the ground work of all your efforts regardless of the odium that less practical commanding officers or adjutants may shower upon you. · Keep the rifle range work in its proper place, do it thoroughly, conscientiously, and above all practically, and you will then enter on your field practices with confidence in your men and your men with selfreliance and confidence in their rifles.

The British Musketry regulations just issued point out unmistakably the object of shooting on the rifle range, and clearly demarcate the dividing line between the musketry training of the soldier on the range and in the field. Para, 101 should be studied and thoroughly understood. It says: "In Tables A and B, the soldier is trained to acquire a high standard of skill in shooting at known ranges in the open and from cover. He first fires deliberately at bulls-eye targets, practices designed to enable him as a recruit to carry out what he has been taught on the barrack square, or as a trained soldier, to revive his previous skill. He thus learns the peculiarities of his rifle, and what allowance in adjusting the back sight to make for light and wind and all other conditions affecting shooting. Deliberate practice at a bulls-eye target, however, tends to inculcate a slow method of shooting. soldier is accustomed, before pressing the trigger, to wait for a lull in the wind, or a favourable light, to rest when he is unsteady, etc. To overcome these tendencies he is also trained to fire first under a time limit, then rapidly at a figure, to shoot from cover, and finally in snap shooting. He is taught, in fact, to use his rifle at known ranges, in the open and from cover, at easily visible targets exposed in known or approximately known positions."

Here, then, is clearly and forcibly expressed the object that all range shooting has in view. It rests on the recognised principle that the first endeavour of the company and squadron commander should be to give the soldier confidence in his rifle. This confidence comes from a knowledge that the soldier can hit a mark provided it is distinctly seen and the range known. It does not mean, however, that as long as the soldier is in the Army he must be dry-nursed into hitting the bulls-eye. This is a very important fact which I fear is not always realised by company and squadron commanders, for I see men of 6, 12, or even 20 years' service, still being dry-nursed on the rifle range. A recruit undoubtedly requires assistance to enable him to understand the difficulties that wind, light, etc., throw in the way of accurate shooting, and a sergeant at his elbow, to advise and encourage him, is an

indispensable and desirable adjunct. It is just possible that during his first year's shooting of the trained soldiers' course some assistance may still be extremely desirable to enable him to revive and confirm whatever skill he has acquired during his recruits' course. But what I wish to impress upon every squadron and company commander in the Army is, that the high standard of individual training demanded by modern war makes it absolutely imperative that the soldier should sooner or later be able to fire Table B on the range without any assistance whatever. There should come a time when the dry-nursing, which is most useful, let us say, during the first two years of the soldier's career, should be withdrawn, and the soldier required to watch each shot he fires and exercise his own judgment as to where and how he will deliver the next. I have made inquiries in different regiments and from company commanders of known ability and tried experience as to whether their men, if left to themselves, could or could not attain a fairly good standard of efficiency. The reply has generally been in the negative, the reason urged being that the men in the ranks are not sufficiently intelligent to be left to their own unaided judgment. My own experience and observation, however, does not confirm this. I rather incline to the opinion that there has hitherto been little or no attempt to force the men to think and act for themselves. lations are quite clear as to the standard of individual efficiency required in shooting. "Every shot fired," it is declared, "should be a lesson to the recruit, the main object being to develop his intelligence and reasoning powers and to teach him the elements of field craft, so that he may be able, if left to himself, to use his rifle with effect."

During the recent course of training at the School of Musketry, after the first few days of range shooting, I insisted on the instructors being withdrawn and the officers and non-commissioned officers being left to themselves. There was no hardship in this for the service of the students ranged from two to eighteen years. The shooting at once began to

fall off at every firing point. I particularly watched one noncommissioned officer of ten years' service. He had already made, five successive misses at the moving target at a short range. He fired again. His shot went about a foot past the rear of the target, and, striking the butt, threw up a heap of dust which could be distinctly seen even at double the distance. At the next run of the target he fired again with the same result, and it is quite possible that he would be firing still if I had not allowed the instructor to again assist him. As soon as he pressed the trigger he dropped his head on his arm and waited for the signal to go up. He did not make the slightest attempt to watch for the fall of his shot. As soon as the instructor told him, what he could easily have seen for himself, where his shots were striking, and having drawn a rough diagram of the target on the ground showed him where to aim the next time he got on the target. Here, then, was a man of ten years' service who could not hit a target at 200 yards without the advice and assistance of an instructor, and it is conceivable that he will go on until he has 21 years' service, becoming a marksman or first class shot every year by the aid of his colour sergeant who tells him where each shot goes, what to allow for windage, and how much to reduce or increase his back-sight elevation after each shot.

This I do not believe to be the object of the regulations. When once a man, after two or three years' service, has, with the assistance of his superiors, become a first class shot or a marksman, he should then be forced to fire his annual course without assistance. Why are the spotting discs placed on the target to show each shot? Why do the markers, with the flag, signal right, left, or high, when a shot misses the target? Is it to enlighten the instructors or superintendents and to enable them to tell each man where his shot has gone? No, it is to inform the man who is firing, and when this information has been conveyed, it is for the man himself to make use of it so as to get a better shot in next time. The

instructor, if he interferes at all, should confine himself to asking the man a few simple questions such as-Where did your shot go? What do you propose to do now? Where did you aim? How much are you allowing for the wind? The man is thus forced to observe the effect of each shot, to think for himself, and to rely on his own judgment. Each shot becomes in reality a lesson to him, and in time he will be glad to be left alone. The shooting of a regiment will probably fall off considerably, but whatever standard is attained will be a practical standard: it will be of ten times more value in the field than a much higher one obtained by Superintending Officers doing everything for the man except holding his rifle. A man who becomes a marksman or a first class shot, or maintains this standard annually by his own individual efforts, is ten times more valuable in the field than one who is dry-nursed up to that standard every year, and I conceive that the badge earned under the former conditions would be a much greater source of pride than one obtained under the latter. Furthermore it is only these men who can be relied upon to achieve any reliable results in the field under service conditions. company commander who can take thirty men from his company and say "These men have become marksmen and first-class shots on the range without any help whatever" has achieved a great measure of success. He can, with confidence, take these men to individual off-the-range practice, where he may rest assured, they will perform with credit to themselves and the regiment. By gradually adding to them every year he will soon succeed in building up a company which, in my opinion, will attain greater results in the field than double the number of any other soldiers in the world, and the remarks, "It is certain that thousands of rounds are wasted every year by being fired under conditions in which it is impossible to see if men know or care whether they hit or not, or where their shots are going," which occurred in last year's Musketry Circular by the Commander-in-Chief, will not apply, at any rate, to his men.

We hear on all sides that the peace training of soldiers must as far as possible be assimilated to, or brought into line with, the actual conditions of war. Practical musketry is the order of the day and as to its utility and soundness there can be no two opinions. Some fifteen years ago the German regulations stipulated that "the soldier is trained on sound principles when he can do what is required of him in war and when he need unlearn nothing on the battle-field that he has been taught on the parade ground." This, at that time, was the opinion of musketry experts in the German Army, and they were hitting in the right direction undoubtedly but they appear to me to have over-reached themselves a little. The relative utility of the parade ground and the rifle range in the training of the soldier has already been dealt with. I have endeavoured to bring home the fact that the former is merely the stepping stone to the tactical training in the field, and the latter the starting point for the practical musketry work. The German authorities, it will be observed, if my dictum is of any value, overreached themselves since they jumped from the parade ground to the field of battle. I would now desire to impress on all that there are certain intermediate stages in the musketry training of the soldier between the parade ground and the actual scene of strife, and that, whilst the advance from stage to stage in the soldier's training should be so gradual as to make the line of demarcation almost an imperceptible one, still the gulf between them is deep and broad and must not be taken lightly.

There is the first, or parade ground stage, during which, as I have already enumerated, the soldier is taught to handle his rifle, the rules for aiming, the words of command required for fire discipline and control. There is the second, or rifle range stage, where the soldier is taught to apply the principles inculcated on the parade ground, to shoot with accuracy under favourable conditions with the assistance and

encouragement of a good instructor, and generally to be imbued with a feeling of confidence in his ability to hit the bulls-eye. There is the third, or what the Adjutant-General in India appropriately terms, the individual off-the-range stage, where the lessons learned on the rifle range are practically applied by the individual soldier in the field. There is the fourth, or collective firing stage, wherein the application of fire to tactical conditions by squads, sections, companies and battalion receives attention; and lastly there is the fifth, or field of battle stage, in which officers, non-commissioned officers and men justify, or not, the time, labour and expense incurred in their training.

Here then are the five stages in the musketry training of a soldier and it is by distinctly recognising and realising the value and distinctness of each that officers and non-commissioned officers will be able to ensure that systematic and progressive musketry training of the men in the ranks which will produce early and decisive results. They will not, as people fancy they are at present inclined to do, mix up the theoretical with the practical musketry. They will not also rush into the practical musketry without feeling quite confident that their men are prepared to acquire knowledge and derive benefit from it. They will clearly understand that the theoretical part of the soldier's training ends with the second stage and that they are neither wise nor justified in proceeding to the third and fourth, or practical stages, until their men are both individually and collectively in a position to derive advantage from, and make practical progress during, this the most important and interesting period of the soldier's training for war.

I cannot resist the opinion that hitherto the warning notes issued from Army Head-quarters have been justified, and that in many regiments the line of demarcation between the different stages has been faintly drawn or but dimly perceived, and men are hurried to the third and fourth stages who are atterly incapable of benefiting by the field practices, and who

consequently waste tens of thousands of rounds of ammunition which, in well governed companies and squadrons, would be of the greatest value in furthering the war training of the auite in with. and am accord "Cavalry Tactics of To-day" some may already have gathered that, I heartily endorse the opinion of who maintain that the decisive factor of all training which training in the degree to musketry for its standard of efficiency on the requirements actual warfare, but I do not wish it to be assumed from this that the men should one and all, regardless of their individual deficiencies and weaknesses, be dumped down to field firing at unknown ranges and at difficult targets.

This brings us back to the remarks I made regarding the way in which the training of the soldier should be conducted in stage two, that is on the rifle range. I insisted that when the company or squadron commander was absolutely certain that twenty or thirty of the marksmen and first class shots could attain to this much desired and coveted standard of efficiency by their unaided efforts, he should conduct them to the individual off-the-range practices. These are the only men who can be expected to do justice to, and derive practical advantage from, the execution of these exercises. This will mean that only three or four hundred men in a battalion of infantry, and one or two hundred in a regiment of cavalry, will be exercised in individual off-the-range work during the first year, and a great saving of ammunition hitherto expended in putting the whole regiment through the field practices recommended in the regulations will be effected. This might be devoted to the further training of the backward men on the rifle range. In fact these backward men should be kept on the rifle range, in the same way that an awkward recruit in a squad is prevented from advancing to the next higher squad, until his commander is satisfied that he is likely to justify his further advancement.

In directing that 3rd class shots shall fire blank ammunition

and not ball during the field practices it is clear that those who are responsible for the musketry regulations of the British Army are fully alive to the uselessness of asking a bad range shot to fire with his more proficient comrades in the field. But I doubt their wisdom in this arbitrary discrimination between men who are, or who are not, likely to shoot well under conditions that approximate the circumstances of war as nearly as it is possible to make them in peace, for I believe that a 2nd class shot who has, by his own unaided judgment and efforts, unfettered by the too often meddlesome interference of his superiors, attained that standard will be a better and more reliable shot in the field than either a marksman or a first class shot who is willingly or unwillingly still kept in leading-strings. I do not know what views commanding officers hold or are likely to formulate regarding this, but I am confident that they will readily agree that a battalion which possesses the greatest number of men who can be relied upon to attain a high figure of merit such as that required to become a marksman or 1st class shot without the assistance of instructors and superintending officers must assuredly be the best war-shooting regiment in the Army. Others may, by methods well known to "slim" non-commissioned officers, dry-nurse their men into a higher figure of merit on paper and for a time attain a fictitious reputation, but even if they escape the condemnation of the solitary musketry expert in India, the stern arbitrament of war will soon find them out, just as the South African War disclosed the almost universal failure to tactically apply their fire in the field.

The third stage in the musketry training of the men now demands attention. The regulations, although they do not endeavour to demarcate the various stages as I have done, are quite clear as to what should now be undertaken. "At ranges up to 600 yards," says paragraph 112 of the Musketry Exercises, "individuals will be trained to (i) prompt action against targets presented unexpectedly for a short period;

(ii) to judge distance and observe fire; (iii) to make the best use of folds of the ground and other cover; (iv) to recognise the distances at which individual fire will be effective. A separate target will be provided for each man, steps will be taken to ensure that he is informed of the value of each shot he fires, and the exercises will be so managed that the firers are at first stationary, then in movement, whilst targets are raised as desired. In the earlier practices the men will work in pairs, one firing whilst the other observes the effect of his fire."

Now the aim and object of these regulations are to make the man a practical and self-reliant rifle shot, and if a company commander has followed out carefully and persistently the idea I have endeavoured to make clear with regard to the training of the soldier on the rifle-range, he will already have made considerable progress in the desired direction. fact, the thirty men who have by their intelligence and unaided efforts emerged as marksmen and 1st class shots from the performance of their annual course may now be considered to be practical and self-reliant shots under such conditions as prevail on the rifle range. That is to say that given the distance, a large and distinct target, favourable conditions, comfortable positions, a marker to show them where each shot goes, plenty of time to aim and no disturbing elements, they can, when left to themselves, be relied upon to attain a high standard of merit and give satisfaction to their company or squadron commander. They now, however, embark upon a new, a distinct, and a decidedly more practical stage in their training for war. They are called upon to shoot another course in which all the favourable conditions mentioned above are absent with the exception, perhaps, of the markers who must still be considered necessary for reasons that will be discussed later on.

### CHAPTER VI.

But the coast is not yet clear for the thirty men. They have to go through yet another ordeal before they commence their work in the third, or individual-off-the-range They have to satisfy their company or squadron commander that they can, under conditions that are found on service, judge distance by eye up to and including 600 The regulations demand that they shall satisfy their commander that they are competent to estimate the distance of men and natural features up to 600 yards only. this respect I think the regulations err, if anything, on the side of leniency, and I would prefer to see the minimum fixed at 800 yards, both because I think it comes nearer to the requirements of modern war and because I think the men are quite capable of doing it. I have long held the opinion that judging distance is but perfunctorily taught or practised in the majority of regiments and that the standard attained is not such as to encourage one to believe, or even hope, that under service conditions our men, when unable to use the mekometer, will acquit themselves well.

Believing as I do that a high standard of judging distance will increase ten-fold the fire efficiency of our Army I decided to thoroughly and practically test, in this important subject of their training, the seventy students who attended the last course of instruction at the School of Musketry. With this object in view they were given a week's preliminary instruction on the lines laid down in the Musketry Exercises and in the excellent pamphlet issued under G. C. Press, Simla, No. 269 A. G., 29-7-04. Considering that the students had at some time or other taken part in these preliminary exercises in their regiments it might appear superfluous to have devoted a whole week, out of the eight weeks available, to it at the school. But I wished to ensure the tests I proposed to carry out being as reliable as possible and so

the preliminary practice was continued until at the end of a week I felt tolerably certain that they could describe the appearance of soldiers standing, kneeling, or lying down at different distances up to and including 600 yards, which is what our present regulations aim at. I am very sceptical, however, as to the practical utility of this course. the appearance of men at 100, 200, 300, 400, 500, and 600 yards may assist those learning judging distance, still the latter can never attain to any very high standard of efficiency The farmer can tell us within a few yards by such means. the length of a field, and the bushman of Australia can say within a few yards the length of the sides of his clearing; but it is not because the former observes how the posts and rails look at a certain distance, or the latter how the trees at the distant corner appear, or how distinctly or otherwise the branches stand out. It is because they become accustomed, by long association with nature, to recognise what 200 or 400 yards is. They have a sense of space and distance which is cultivated from their boyhood, and fostered by their surroundings and constant contact with nature. This is what we should aim at with our soldiers. should, apart from the appearance of men at different distances, be able to say this man is 200 yards away and not This is just what the students were unable to do. man who cannot tell that the length of a barrack room is 60 yards will gain nothing by being able to say "That man is 60 yards away because I can see the buttons on his tunic," since the buttons can be seen at 40 yards and 80 yards also. The same applies to longer distances such as 300 or 400 yards where a soldier's bandolier can be seen with almost equal distinctness at each of these ranges.

Whatever method has been adopted in the different regiments from which the students came, it cannot be said that the results are encouraging. My view of the case is that judging distance is not taken seriously enough. I see judging distance practices with soldiers of many years' service still being conducted on the regimental parade ground, or on the ground in its immediate vicinity, and there is little or no attempt to make the subject interesting both to instruc-

tors and instructed. The practices are still conducted as separate parades instead of forming part of every tactical movement which should have for their object the bringing of a prompt and effective fire to bear on the enemy. The instructors themselves are not good judges of distance. The corner of the officers' mess, the "D" company cook-house, and the corner of the regimental garden are judged on over and over again until the men without any intellectual effort whatever are able to make 70 or 80 points at each practice. useful in itself but it should not end here, as is, I fear, too Judging distance goes hand-in-hand with often the case. shooting in the field. It is of equal if not greater importance than shooting, for, without it, on the day of battle thousands, nay millions, of rounds of ammunition are wasted and the marksman is of little more use than the third class shot. The time, labour and enormous expense entailed in putting a quarter of a million of men in India through their annual range and field practices is likely to be of little avail if the men behind the rifles have not attained a practical standard of efficiency in judging distance by eve. And yet if the result of the 44 exercises recently performed by the students at the Musketry Class, whose services ranged from two to sixteen years, can be taken as any criterion, this is the existing state of affairs.

In the British Musketry Regulations for 1905 it is laid down that marksmen and first class shots who do not attain a certain standard of efficiency in judging distance by eye will be relegated to a lower class in shooting. This is undoubtedly a move in the right direction, and if it is carried out in the spirit of the regulations, should go a long way towards improving the judging distance in the Army. It is open to question, however, as to whether the standard aimed at is high enough. A marksman must get 65 points and a first class shot 50, but in these must be included in each case 20 for time, for no man takes more than half a minute to form his opinion, and if he did it would be impossible with a large number of men to allow each man to turn about in his own time, and so allot marks for quickness in coming to a conclusion. It may therefore be assumed that,

provided the marksman makes 45 and the first class shot 30 in the actual judging distance, they will succeed in satisfying the requirements of the regulations. A marksman who gave the following replies would attain the required standard:—

	ıst.	Distar	ice boo	).	Answer	500.	10	points.
	2nd.	Distar	ce 400	٠.	Answer	350.	15 1	points.
	3rd.	Distar	ice 300	٠.	Answer	200.	10 1	points.
	4th.	Distar	ce 200	).	Answer	300.	10 ]	points.
			Tota	ıl			45 1	points
and h	as ma	Distance 400. Answer 350. 15 points. Distance 300. Answer 200. 10 points.						
		ıst					16.66	
		2nd				• • •	12.50	
		3rd			•••	• • •	33.33	
		4th	•••		•••	•••	50.00	

4)112.49 28.12

or a mean percentage of error of 28.12.

A first class shot who gave the following replies would satisfy the requirements of the regulations:—

ıst.	Distance 600.	Answer 450.	5 points.
2nd.	Distance 400.	Answer 500.	10 points.
3rd.	Distance 300.	Answer 200.	10 points.
4th.	Distance 200.	Answer 350.	5 points.

Total ... ... 30 points

and he has made a percentage of error in each case as follows:—

ıst	• • •	• • •	• • • •	• • • •	25.00
2nd	•••	•••		• • •	25.00
3rd	•••			• • • •	33.33
4th			•••	•••	75.00

or a mean percentage of error of 39.58.

When it is remembered that the men are asked to judge only up to 600 yards, can the standard demanded, viz., an

error of 28.12 per cent. for marksmen and 39.58 per cent. for a 1st class shot, be considered sufficiently high? It means that if a squad of 1st class shots were lying down and firing at an enemy only showing his head and shoulders say at 400 yards, we are content if their back-sight elevations vary from 240 yards to 560 yards, which cannot by any stretch of the imagination be considered satisfactory, especially when we remember (and this cannot be too often insisted upon) that the higher the standard of individual shooting attained the more important becomes the necessity for an accurate knowledge of the range.

The small pamphlet entitled "Instructions for Judging Distance and Visual Training," to which I have already referred, and which has been issued presumably for the guidance of all the regiments in the service, says: "It may therefore be laid down that at ranges up to 1,500 yards an error in judging distance of more than 100 yards will cause collective fire action to be inefficient." And again, as a corollary to the above, "it therefore seems that a mean error not exceeding 100 yards is the required standard of excellence in estimation of range. Officers and soldiers who fail to achieve this standard cannot be classed as efficient. The standard is practically identical with that set up in continental armies, who, however, adopt percentages of error."

As will be seen from the figures entered above, in which I pointed out what errors the standard laid down permitted, a marksman who makes a mean average error of 28.12 per cent. and a first class shot who makes a mean average error of 39.58 per cent. are permitted to retain their grading of marksman and first class shot respectively, and, in fact, are considered proficient judges of distance. In its depreciation of the standard of mean percentage, and its preference for a definite distance in yards such as 100, which must not be exceeded in error, the pamphlet overlooks the fact that whilst the former method is more tolerant of error at the long ranges, the latter is more tolerant of errors at the short ranges. No continental nation will accept a standard which admits of men not knowing the difference between 200 and 300, 500 and 400, especially if judging stops at 600 yards.

The next point in the test practice which appears to be worthy of consideration is that, according to the regulations, the marksmen and first class shots are to judge on dummies or men standing at the longer ranges. By the longer ranges I presume is meant 400, 500, and 600 yards. This appears to me to be of doubtful utility and is certainly conducive to false ideas as to service conditions. At decisive ranges the enemy does not stand up to be shot at. If he is anywhere in view he is showing as little of himself as possible. A German officer who accompanied the Russian Army in Manchuria. writing to the "German-Japan Post," says of the Japanese infantry:-" Only a few hundred yards off lay their infantry, of whose presence one was unpleasantly aware by the bullets that passed over one's head, but one practically never saw them. An upraised arm, the top of a headdress projecting from behind cover,-that was all one ever saw, whole figures one never saw, especially in the attack." Those who fought at Belmont, Graspan, Modder River, Magersfontein, Paardeberg, and on the Tugela, will unreservedly bear out what the above quoted German officer says. The fact is that men are not found standing up to be shot at nowadays even at a range of twice 600 yards. Digging half the night the attackers will be found at daylight mere heads and shoulders showing at perhaps 1,300 or 800 yards. The next day at 900 or 500 and so on. To shake such men and so demoralise them that they will give up in despair, our men must be able to judge distance up to at least 800 yards and with more accuracy than is demanded at present. Our constant endeavour is to make shooting approximate service conditions as much as possible, and, as far as the shooting is concerned, we are undoubtedly making steady and continuous progress on these lines, so much so that I believe our small Army to be the most practical shooting Army in the world. As I said before judging distance must go hand in hand with shooting, that is to say the more proficient the soldier becomes in rifle shooting the more necessity for his capacity to estimate distances accurately. Can it be considered practical to stand infantrymen up at 400 or 500 yards and judge distance on them? I have no doubt whatever that those responsible for

the regulations can adduce good and probably logical reasons for so doing.

Then again the regulations under review lay down that, "If possible the test practice should be executed over unknown ground." This permits of great elasticity in the standard aimed at. We know how difficult it is to obtain new ground for every practice especially where a great number of men have to be exercised. But it is not by any means impos-In order to get new ground for each of the forty-four practices carried out by the 70 students during the recent course of instruction at the School of Musketry, my Staff had to walk or ride miles every evening to select the new areas and variety But it was done, and with the exception of the first two practices which were purposely conducted in the vicinity of the Polo ground, the squads were never exercised over or even near the same ground twice. The great mistake is that the selection of ground and the placing of the men to be judged on, is too often, if not always, left to the Sergeant Instructor of Musketry in the battalion, who selects objects most easily ranged on and as close to the barracks as possible. I would suggest therefore that it should be distinctly laid down that the test practice is to be carried out over unworked ground.

It is a truism to say that before a man can judge distance he must see the enemy to judge upon him, but it is also a truism which although generally admitted is not often practically applied, that the more we promote judging distance and shooting under service conditions the smaller will be the percentage of rounds thrown away when the men are subjected to the influences of the battlefield. Men lying down, or kneeling, and firing from the side of cover can, after a little practice, be located up to 400 vards and it is on such objects as these and not on men standing in the open at such short ranges that our men should be exercised in judging. It has the great advantage that it forces the men to exert themselves, to use their eyes, and habituates them to habits of constantly endeavouring to locate the enemy which is of supreme importance when fighting an enemy dressed in khaki and using smokeless powder. During the practices carried

out at the School of Musketry this point was constantly kept in view and impressed on the students at every practice. six out of eleven practices they were forced to locate the enemy before any judging distance answer was accepted. This added tremendously to the interest taken in the work, and it was surprising the eagerness and interest displayed by all ranks in endeavouring to be the first to locate the enemy and give the range. They were also impressed with the importance of the subject, since they were being fired at with blank the whole time, and knew that they could not return the fire with any effect until the enemy was located. There was no attempt to render it absolutely impossible for the enemy to be seen with the naked eye since such methods only tend to dishearten and discourage. The positions for the enemy were carefully selected by me the evening before the practice. On one day ten men were firing from the sides of bushes, at another from the sides of tree stumps, at another standing or kneeling on the near slope of a hill with suitable back-grounds. They were always supplied with abundance of blank ammunition which permitted of a continuous fire for 5 or even 10 minutes. This is of great importance as when the supposed enemy after firing 2 or 3 rounds stops firing, the practice begins to lose in its reality and approximation to This was impressed on me by the stuservice conditions. dents themselves who requested that the opposing squads should be provided with such a supply of blank as to permit of their continuing firing until they were located. There is nothing more demoralising, nothing in war that tends to lower the morale of a fighting force so much as to find itself lying down within effective or even decisive range of an enemy and, whilst suffering losses, being unable to locate This is what happened at Colenso and Paardeberg, and it speaks volumes for the discipline, the esprit de corps and the morale of our men that they proved themselves capable of withstanding such severe trials. And in sending the students back to their regiments thoroughly impressed with the importance of acute observation and quick location of the enemy I feel confident that the School has achieved something in the right direction.

Before proceeding to call attention to some of the results attained in each exercise performed by the students, I think it is as well to point out that in the absence of any fixed standard of efficiency in our regulations I have, for the purpose of comparison, fixed upon an average error of 12½ per cent, as the limit to be allowed. I do not consider this an excessive demand since our men are practised only up to 600 vards. The French regulations of 1903 say that experienced men will judge distance by eye up to 1,400 yards, with an average error of 15 per cent. In Austria, men who make an average error of 10 per cent, are considered good judges, 20 per cent.-indifferent, above 20 per cent.-bad. The German regulations, like our own, have no fixed standard. The Bulgarian regulations regard 10 per cent, as the normal error. men who have made an average error of not more than 18 per cent, are permitted to take part in judging distance competitions, those with an average error of 10 per cent., and a few with 15 per cent. are considered picked men for judging distance. In Russia the regulations demand that the average error should not exceed 5 per cent.

It may further be noticed that whilst in our Army the men are practised in judging distance up to 600 yards, in Austria all soldiers are obliged to be able to judge distance up to 800 yards. In Germany they are taught to judge up to 840 yards and practices up to 1,400 yards are carried out, and in Italy, where perhaps judging distance is taken more seriously than in any other military nation, a competition is held annually before the close of the musketry year. For this competition there are ten distances to be judged, none being less than 500 yards, some of them being more than 1,400 yards. To qualify as a "select judge of distance" the soldier's mean average error of all the exercises must not exceed 10 per cent., and he must not have made an error of 15 per cent. in more than 3 exercises.

From a consideration of the above I think it is clear that the consensus of opinion inclines to the view that men should be able to judge distance by eye up to at least 800 yards and that an error of more than 10 per cent. at any rate up to that distance is not considered good. In fixing, therefore, 12½ per cent. as the limit of the average per cent. of error that should demarcate the good from the bad judges of distance, I hope I shall not be considered to be unreasonable.

To ascertain how many men of a squad are capable of attaining this standard the company commander should record a practice as follows:—

Correct Distance	200		500		600			
Rank and Name.	Answer.	Error.	Answer.	Error.	Answer.	Error.	Total of percentages.	Average per cent, of error,
Corpl. A	200	00.00	550	10,00	700	10.66	26,06	8.88
Sergt. B	250	12.20	450	10,00	650	8.33	32.83	10'27
Pte. C	300	20.00	550	10'00	550	8.33	68.33	22.24
Pte. E.	250	12.20	500	00,00	600	00,00	12.20	4,15
Pte. F.	200	00.00	550	10.00	650	8'33	18.33	6.11
Pte. G.	300	50.00	500	00,00	600	00,00	50.00	16.60

It may be pointed out for the benefit of those who may wish to test their squads or companies by the average-errorper-cent, method that this method is open to the great objection that it is more tolerant of error at long than at short ranges, whereas, properly speaking, the opposite should be the case, for it is certainly true that it is easier to miss at long ranges and, therefore, that misses are more excusable; but they have far worse consequences than at short ranges, for the dangerous space which might make up for the error in judging distance does not increase with the range but diminishes. For example a soldier who makes an error of 12½ per cent. at 400 yards and gives the range as 350 or 450 yards would either hit an enemy kneeling or go so close to him as to make him seek protection under cover. If, however, he made an error of 121 per cent. at 1,600 yards and gave the range as either 1,400 or 1,800 yards he would drop his shot so far in front of his enemy or so high over his head as to produce no effect whatever.

On the last two days of their judging distance course the students were exercised in long range judging distance, over unknown ground and against skirmishers standing or kneeling. The results were very disappointing and although it is admitted that judging distance by eye can seldom or never be reliable at ranges of much more than 800 yards, still, I think, our officers and non-commissioned officers, both of the British and Indian  $\Lambda$ rmy, should not be guilty of such egregious errors as the following which are taken from the answers recorded.

1st. Distance 1,100 yards.

Some of the recorded replies are:-

Two gave it as 500, four as 600, fourteen as 800, five as 1,300, and three as 1,400 yards.

2nd. Distance 500 yards.

Nineteen gave it as 700, seven as 800, six as 900, and four as 1,000 yards.

3rd. Distance 1,100 yards.

The replies ranged from 800 to 1,500 yards.

The results of the other five distances were on a par with the above.

Finally an exercise was conducted by night, the students being asked to say approximately how many hundreds of yards off they considered a farm, a hill, or a line of trees to be. The answers were satisfactory. It was pointed out to them that the fighting of the future will be carried on much more by night than by day, and that it is essential that they should, whenever opportunity offers, test their own capabilities of roughly estimating the distance of objects in the dark. It was further explained to them that if they are told to place their men in a position under cover of darkness so as to be able to rush a farm, a village, a hill, etc., at the first streak of dawn, they must not go so close as to alarm the enemy's sentries, nor must they halt so far away that the

object of the night march will be lost through having to attack over a long distance when day breaks. The next day in the lecture hall, the early part of the Magerssontein surprise to illustrate the former, and the affair at Belmont to exemplify the latter, were read to the students from the second volume of the "Times" History of the War and it is hoped that the importance of the subject has been realised by all.

Do not for one moment assume that, because there are at times available other means of ranging such as the mekometer or trial shots, we can afford to relegate judging distance by eve to a lower category in the training of our men. It is not always possible to get good or even satisfactory results from the mekometer as the enemy's fire and the difficulty in selecting clearly defined objects to range on have always to be reckoned with. Ranging with volleys or with trial shots also demands certain favourable conditions before it can be practi-We must have plenty of time to do it cally utilised. in, a suitable position from which we can watch the strike of the bullets, ammunition must be plentiful and its expenditure of little or no consequence to the situation, and the observers must be so competent that they can be relied upon to draw sound conclusions from their observations. From this it will be gathered that many favourable conditions have to present themselves before either the mekometer or the rifle can be relied upon to give us the range of our opponents who may be doing us harm. When pursuing an enemy with fire, when we have seized a position just in time to deny it to the enemy, when we are surprised by a sudden burst of fire from an unexpected direction, when a battery of artillery § crossing our front comes into view within range for a short time only, in each of these situations and in many more of a like nature we must rely on our estimation of the distance by eye to derive any benefit from our fire. There are undoubtedly occasions in war when the confusion clearly seen in the enemy's ranks shows us that we have got the range or thereabouts, but there are numberless other occasions when, if we



have got the range exactly, the effect of our fire will not be Furthermore, I would point out that at once noticeable. whenever the ground is favourable for ranging with trial volleys, a rough idea of the distance will greatly facilitate and expedite the ranging and so save a wastage of ammunition, a consideration, the importance of which must never be lost sight of especially during the attack of a position. During the conduct of the judging distance test practices at the School of Musketry in July last one of the distances was 500 Nineteen officers and non-commissioned officers gave it as 700, seven as 800 and six as 900 yards. How many rounds of ammunition would such officers and non-commissioned officers waste in endeavouring to find the range by trial shots, and how much ammunition would be saved, how much the ranging operation would be expedited, and how much quicker would an effective fire be opened by officers who after a few seconds observation could say that the range was somewhere about 500 yards.

Nor are these the only cogent reasons why we should give greater prominence to judging distance by eye in the training of our men. The recognition in our regulations that under the stress of modern battle each man will often have to fight guided only by his own intelligence, and the consequent necessity of uncontrolled fire, decides conclusively what every cavalryman and infantryman must be capable of in the matter of judging distance. It is when we get to within 800 yards of the enemy's firing lines that the mekometer can no longer be used, and the excitement of battle, the bursting of shells, the whistling of tens of thousands of bullets and the sheets of lead which, like the pattering of hail stones on a dusty road, strike ten thousand different points of the enemy's position, render utterly impossible any attempt at ranging by trial shots, and we are compelled to rely on the individual soldier in the ranks to form his own opinion as to the range. this distance the estimation of the distance by eye is necessary only for those whose duty it is to control and direct the fire

of the squads, sections, half-companies and companies, viz., for officers and non-commissioned officers. I do not consider that a very high standard at these distances is either obtainable or necessary, since, except under most extraordinary circumstances, it will be possible to use the range finder at distances of 1,000 yards and more. But it is the unexpected that happens in war and in the training of officers, non-commissioned officers and men it is for this that we must be prepared, and so opportunities to accustom even the most subordinate leaders in judging distance up to the limit of effective ranges must be constantly sought for and made the most of.

In carrying out our judging distance practices we have not hitherto made any systematic attempt to compare the results obtained at each practice with their value as an aid to actual shooting. The association of the judging with the shooting must be fostered and constantly impressed on all ranks, bearing in mind firstly that whilst the effect of the shooting disappears altogether with the most common error of all, viz., wrong elevation, and secondly that the longitudinal error of the trajectory decreases with the range while the error of estimation increases. Judging distance must not continue to be the dull and stupid exercise it has been in many regiments, where the officers or instructors ask the distance, record the replies, and march the men back to barracks. The mechanical and listless manner in which practices have been conducted is clearly indicated by the fact that the majority of officers and non-commissioned officers who attended the last course of instruction at the School of Musketry did not know why they were required to adjust the sights of the rifles in accordance with the opinions formed by them instead of giving The desire to hit the enemy, the estimation verbal answers. of the range, and the adjustment of the sight according to the opinion formed are all indissolubly associated with one another, and it is only when all ranks intelligently realise this that progress on practical lines can be made. To carry it to its logical conclusion the instructor should not rest satisfied with merely recording and announcing the consequence of each error committed, but should, as soon as this has been done, announce the correct distance, cause the whole squad of men to adjust their sights to it and fire two or three rounds of blank at the enemy.

According to the recent pamphlet of instructions on the visual training of the soldier issued by the Director of Training in Great Britain, it has been found by experiment that if a target is placed at 500 yards an error in estimation of distance of 100 yards will reduce the percentage of hits to roughly one-third of that obtained by the correct elevation. and an error of 150 yards to one-tenth of the same, though in actual ball firing a few more hits are normally obtained when the range is underestimated the abovementioned amounts. That is to say that if a squad fires with the correct backsight elevation at a target 500 yards away and gets 90 per cent, of hits, this percentage will be reduced to 30 with an error in judging distance of 100 yards, and to 9 with an error of 150 If the target is set up at 1,000 yards, an error of 50 yards in elevation will reduce the percentage of hits to about one half of that with sights correctly adjusted, and an error of 100 yards to about one-seventh of the same. A knowledge of these facts is extremely useful to an officer since it enables him to inform his subordinates what the actual results will be if they are bad judges of distance.

In the training of their companies or squadrons, commanders will further impress on their junior leaders the extreme importance of the subject if they occasionally insist on their squads firing a few rounds of ball at a target with the backsight adjusted to the distance given by a section leader or soldier who has made a serious error and then the same number of rounds with the correct elevation. If we can attain such a standard of efficiency in our subordinates that a mean error of 10 per cent. or probable error of 8 per cent. is obtained, the expenditure of ammunition in attaining a

desired object will be reduced to nearly one-half and the efficiency of our fire will be nearly doubled. Hence the practical value of our musketry training depends, as I have already stated, on the standard of efficiency in judging distance by eye attained by our officers and non-commissioned officers. Thus a single reliable estimator in a squad or troop will double the probable effect of fire of his party, whereas a crack shot will scarcely improve it at all, for the former brings the cone of fire of the whole squad or troop on to the objective, while the latter brings merely his own shot. The former is of greater value the better the marksmen are; the latter only have effect if the estimation is good.

I cannot therefore urge too strongly the supreme importance of company and squadron commanders devoting their attention much more in the future to judging distance than they have hitherto done. Take the men away from the vicinity of the parade ground, perform the exercises in confunction with tactical schemes, seize every opportunity when marching to and from cantonments to practice the men in judging on natural objects and over varying kinds of country. Go into the hills, along the valleys, into the scrub and bush country and along the river beds for it is in such places that battles are fought and not in the neighbourhood of the barrack rooms. Use plenty of blank ammunition and never judge distance on one man only. Go out the evening before, take three or four non-commissioned officers with you and select positions for them to occupy with their squads the next day. See that the positions taken up are such as an enemy would occupy in war; that the men are well extended; that they fire from the side of cover; that they make use of the background to ensure their location requiring some exertion and above all that they are provided with thirty or forty rounds of blank each so that they can keep up a steady and continuous fire until the men detect them and the company, having estimated the range, opens fire. This will add a great deal to your already onerous duties, but it will ensure

the work being above all things practical and distinctly interesting to all ranks. The fighting efficiency of a company is to be guaged only by its fire producing effect, and a sound, a practical and a common sense course of judging distance practices will do more than anything else to promote that standard. It cannot be too often repeated, for it is not realised in our Army, that the more accurately the soldier is trained to shoot, the more necessary does it become that his sights should be set to the correct range.

The rifle with which our men are armed is so accurate, and the grouping of the bullets fired by a marksman so close, that even a small error in estimation of range will render his fire ineffective. If it took ten tons of lead to kill a Boer, my firm conviction is that nine tons of it were wasted through officers, non-commissioned officers and men being one and all rank bad judges of distance. And the Army, as a whole, is no better to-day. It is no exaggeration to say that next to the soldier's personal qualities, an accurate and correct estimation of the range is one of the decisive factors of modern war, and any company, troop, or squadron commander who is either ignorant of or ignores this fact, is assuredly paving the way for disappointment and perhaps humiliation in the future.

## CHAPTER VII.

Closely allied with judging distance, and intimately connected with shooting in the field, is the capacity to descry the movements of an enemy at a distance, to locate his position, to describe it with brevity, and to be able to at once locate the enemy from the short and clear description of others. It requires no demonstration to prove that until the men can locate the enemy they neither estimate the range nor shoot And yet these facts have been so little realised or intentionally overlooked hitherto that one almost despairs for the future. To develop the visual powers of the soldier, to develop in him the bump of locality, to give him an eye for country and the ability to describe it, in short to bring the barrack room soldier into line with the frontiersman of Canada would appear to be a task quite beyond the powers of the British officer. But when taken in perspective the task assumes abnormal proportions only because of its neglect in the past. The strength of a modern Army is the strength of its smallest link and the smallest link is the individual soldier in the ranks. It is in the frank recognition of this, and in the concentrated efforts of leaders of all grades to make the smallest link as strong as possible that we must look for the future efficiency of our Army. Those responsible for the principles inculcated in the manuals issued for our guidance are fully alive to this fact, and in the absence of his leaders or when control is no longer possible, they insist that the individual soldier shall be able to comprehend the meaning of each operation and intelligently carry it out.

Keenness of vision, acute observation, appreciation of ground for fire purposes and an intelligent description of it are all part and parcel of this intellectual training which is to

qualify him to fight intelligently in the field, and there is no other part of the soldier's training which lends itself so readily to be practically dealt with by our officers of hunting, shooting and sporting instincts. Hunting, of all the pursuits and occupations of man, is most directly preparatory to war, should not be an amusement reserved for the pleasure of the officer only. Where it is followed constantly it is calculated to bring forth and eminently to improve the military qualities It may be regarded, in fact, as the of the individual. primary school of war. It confirms the courage of the men and sharpens their intellect in a direction which is most useful on service. Promptitude in danger is acquired - an asset which is of inestimable value to the Army. Only last year, a case came to my notice in which owing to the sudden rush of a panther, the lives of two officers were endangered. Native troopers with them, by their pluck and prompt action, contributed largely to their escape from a position of great By taking part in shooting expeditions the soldier's perceptions are sharpened, his visual powers are called into play, and are developed by his constantly peering through the undergrowth and looking for movements of any kind. His thinking faculties are exercised in contriving the means of locating and circumventing the game. He becomes familiarized with the toils and fatigues incidental to a campaign. He insensibly acquires knowledge of the ground and learns to judge distance. He becomes accustomed to the cold, wet, and mists of a forest country and soon learns to improvise the best materials at his disposal, or within reach, for combating changes of weather. He often has to rely on his own ingenuity for his food supply, and for improvising a fire-place and preparing his food under great discomfort. He has to go out continually by day and night to seek information from villagers and travellers regarding the probable locality in which game is to be found. When he obtains information or ties up a goat he has to find his way back to camp over hills, across wide ravines, and by forest tracks often by night

or through a driving mist by day. This impels him to become a close and intelligent observer of the surrounding country. He becomes habituated to mentally noting different features in the landscape which he knows will be of use to him when he has to find his way back to camp in the night, or by a different track to that which he took when he went out. When he returns he delights in telling his comrades where he has been, the nullahs he crossed, the jungle he clambered through and the heights he scaled. He points out the prominent features he passed, the hills he went over, and the villages that nestle at their feet. The next day he leads his party over the same ground or conducts them to a neighbouring village. shows them where to cross a stream or where to ascend a rocky and bush-clad hill. He becomes accustomed to note the foot-prints of animals, and in time to say whether they are recently made or not; he knows where to look for them and rapidly recognises the points over streams where such tracks may be found.

All this is the kind of training that is required to develop the visual powers of the soldier, to accustom him to quickly descry and locate an enemy, and to describe his position. A month in the jungle with an officer who tramps about in search of game will do more towards training the soldier than years of uninteresting practice in the vicinity of cantonments with dummy targets. India offers facilities for giving the men plenty of this kind of work and pleasure combined, such as few other countries in the world can boast of, and I would urge its extreme importance and usefulness on all those who are responsible for the training of our Army. The British officers are keen sportsmen. Every year, at some time or other, hundreds of them spend weeks in the jungle in search No kind of field managures or method of bivouackof game. ing that generals can devise will give anything at all approaching the impetus given to individual training and intelligence such as will be obtained by a few weeks wandering in the jungles in small parties. Commanding officers in many

cases offer every facility for their men to accompany their officers on these expeditions, but unfortunately they are in the minority and are becoming rarer every year. Fifteen years ago the cavalry regiments of the Hyderabad Contingent could each produce a hundred officers and men who, in acuteness of vision, in bump of locality and in forest craft generally, if equalled, could certainly not be surpassed by an equal number of bushmen in any part of the world. But times have changed since then and year in, year out, the men are hobbled to cantonments and barracks by other more exacting, and as far as the individual soldier is concerned, less profitable duties. Musketry Schools cry out for some, signalling classes swallow up others, mounted infantry courses claim some more, whilst guards, batmen, milkmen, postmen, canteen barmen, coffeeshop waiters and barrack room orderlies all go to swell the number of the great unwashed over whom a commanding officer has little or no control.

Some four years ago I pointed out the folly of making the marksmen and first class shots repeat the same course year after year. This has now been realised in our Army where progress is, I am glad to say, the order of the day, and commanding and company officers are, as far as the marksmen are concerned, relieved of the tedium and monotony of putting scores of men through a course which they have already proved their ability to perform. The same thing applies, and with even greater force, to the annual training of the men. In short service armies such as are found across the channel where the men are with the colours for only two or at the outside three years, it is absolutely necessary to drill, drill, drill, and train, train, train the men every day and all day long during the short time available. But no one can convince me that this same round of training is necessary, day in and day out for twenty-one years, or even for eight. telligent soldiers in the ranks are bored to death by the ever wearving round of company, squadron and battalion training, and intelligent officers see no finality to their work however

well it is done. If the men in our Army after four or five vears of continuous and unceasing training—company, souadron and battalion—are not fit to take part in brigade and divisional manœuvres or take the field during the sixth vear without it, then the system or method of conducting the work must be radically wrong. In any case the energetic and capable company and squadron commanders are kept on the same level with the indolent, careless and incompetent ones, since however well the former train their companies this year they still have to do the same thing over and over again for the next twenty years. I believe our officers are quite as capable as the officers of any foreign Army and if the latter can send their men back to the reserve thoroughly trained in two or three years, I certainly think the former can be relied upon to do the same. If it is not considered advisable to discontinue the training entirely it should, in my opinion, be considerably modified after the third or fourth year. All the elementary details such as a recruit learns should be omitted or at the most left to the discretion of the company or squadron commander. Whilst all are enjoined to devote their energies to the individual instruction of the soldier, the present continuous round of training according to a cut-and-dried syllabus does not give the individual soldier credit for anything, and men of ten years' service are still being taught how to hold their reins, and men who fought in Tirah and South Africa have yearly to stand up and be inflicted with the same elementary details as they went through years ago. In a long service Army like ours in India, the enforced discontinuance of all training and drudgery for three months annually, during the hot weather months of April, May, and June, would be an innovation that would meet with the approbation of every right thinking officer in the Army. The sporting guns, which Government has so wisely and generously maintained in every barrack-room in India for the use of the men, might with advantage be doubled in number, and during the three months of enforced abstention from that weird nightmare "Training," the men should be encouraged and if necessary made to undertake expeditions into the jungles and country. It is there that they will acquire that acuity of vision and quickness of discernment which are rightly considered of importance in their training for war. In any case they will be much more apt pupils than the men who spend the whole twenty-one years of their life within the boundary pillars of a cantonment. There is a tendency nowadays to work the willing horse to death. Thursdays and, with regret I say it, Sundays also are not the days of rest and recreation they used to be when officers and men took flying visits to the neighbouring tanks and rivers for shooting and fishing. Cramped up in the cantonments, spending years of his life in listening to repeated reiterations of things he learned as a recruit, his food prepared and cooked for him in messes, pampered at every turn of the road and stage of his career, the Pathan from the mountainous regions of the north and the Sikh from the jungle settlements of the Punjab, soon lose all the splendid qualities their early primitive life has bestowed, and in a few years have little to distinguish them from the town-bred soldiers. The adoption "en bloc" of the German curriculum of training which is necessary only for short service and conscript armies, and the short-sightedness of commanding officers, have contributed largely to this distinctly undesirable state of affairs. refuse to see what a few minutes reflection would have shown them that with intelligent direction and methodical procedure only a few months careful and steady training yearly under competent and able leaders is necessary to maintain a high standard of efficiency with men who spend half their lives with the colours.

If the thirty men who have become marksmen and first class shots by their own unaided efforts during the preceding year can spend a few weeks of the hot weather in the jungles, the company commander will find his task in training them in judging distance and observation greatly simplified. One

of the great faults of Army training in the past has been the undue and excessive use of the memory involved in learning paragraphs from the training regulations. There have not been wanting officers who have been foolish enough to think that if the soldier knows off by heart the principles laid down for the training of the men in observation that they have satisfied the demands of the regulations. Memory will always be necessary but the higher faculties of the mind should and must be called into play. The reasoning powers of the men must be taxed. Observation must be stimulated by careful and constant attention to the local physical features. first and most important element in the training of the senses is to exercise the senses through material objects, and India, where the men in a few minutes find themselves in the country face to face with nature, untarnished by the rude hand of civilisation, offers unequalled opportunities for putting this principle into practice. The men must be encouraged to observe objects as distinct from mere sight sensations. the beginning points which escape the cursory glance of most men are detected with the instructor's aid, and an effort must be made to stimulate curiosity and awake interest. barrack room and its surroundings should be utilised, then each barrack room in turn, the position of cook-houses, wells, and lavatories noted and described, in fact everything that comes into view from each and every position taken up. The men should then be taken for a short march, first along one road then along another, and at the end of a couple of miles each man asked to say what he saw, where he saw it from, and its direction from his point of observation. roads should be left and the men taken across country, along forest paths and over hill and dale, occasional halts being made to test the men and ascertain whether they have been observant or not. It is not sufficient to say they saw two men, they must say how far away they were, the direction whence they were coming and where they were going. not enough to say they saw some horses, they must say how

many there were and whether anyone was in charge of them They should then be taken into the country and halted at different points, asked to say where they are and describe the country in their vicinity. The mental effort required to form a simple picture of a bush, a river, or a hill should be utilised. The instruction must be realistic and constant encouragement must be given to the men to observe every feature of the landscape and to describe it, in their own words, to the instructor. To this end they should now be freed from the supervision of the officer and directed during their evening walks to visit certain places, such as nullahs, hills, and villages, and be prepared to describe them and what they saw going and coming, at the parade next morning. Even when not specially directed to visit any particular place they should be asked in the morning where they went the evening before and what they saw. As far as oral description is concerned this is the most useful exercise of all, for it forces the soldiers when left to themselves to exercise their powers of observation and intelligence, and adds an interest to their evening rambles such as no effort by order can provide.

The instructor should not rest contented with oral descriptions but the non-commissioned and the more intelligent men should now be required to describe in writing any particular piece of ground and noticeable features in its vicinity. attempt to make men accurate in observation cannot be separated from the need of making them concise and accurate After they have been trained, as recommended in description. above, to observe particular pieces of ground in the vicinity of their position or during their walks and marches to and from barracks, they should be constantly practised, first in making a correct statement of it in their own words and then in committing it to writing. The officer says, "Where are you, Private Smith?" and after some practice the soldier should without difficulty be able to say and then commit to writing, "I am on the small knoll about Soo yards north of the hill

with the white temple on it," or "I am on the right bank of the river Godavery about one mile west of the village of Gokulpur." If this method is persisted in, it will soon be found that the men will never pass a village without asking the name of it, or cross a river without noting the direction of its current, the depth of the water, and endeavouring to its name from anyone they see. answering and submission of the statement in writing and the slight mental effort they involve leads to intellectual improvement and gets the men into the habit of looking about, keeping their eyes open, describing a position and noting its surroundings. This method of teaching the actual observation opens up an easily accessible and attractive field for the exercise of brain and eye. It gives the non-commissioned officers and men an opportunity of learning the simplest natural facts, and directs their attention to external objects, making their military education less bookish. Its sole efforts should be directed to the teaching of the abstract by the concrete and not vice versa as has hitherto been the case when officers have endeavoured to teach men the features and use of ground by dry and uninteresting lectures in the barrack It arouses a healthy and intelligent curiosity to progress further and when this is attained the success of the company commander is assured. It encourages a tendency to self-reliance in the men, and in developing this tendency it must not seek so much to give information as to help the non-commissioned officers and men to get information for It teaches them to see things and not merely to look at them, and if the officers have been fully alive to the possibilities of this part of the individual soldier's education, it will also teach them to connect the simple formations of the ground with their military utilities, which forces them to exercise their reasoning powers.

Whilst many officers agree that to teach the individual men to be observant is undoubtedly a move in the right direction towards their practical training for war, I am inclined to

think that but a few realise its importance in shooting. systematically carried out, as recommended in this chapter and practically applied and made use of immediately before and during a fire action, it will most certainly increase the fire effect of a number of rifles immensely. The predominating weakness of all our musketry training hitherto has been that the men have been permitted and encouraged to fire straight to their front. "Look to your front men," a legacy of the last century still exercises its baneful influence and the tree that has taken many decades to grow is difficult to uproot. Men who, whether on the defensive or in the attack, habitually shoot straight to the front not only forego the great advantages that a long-ranging rifle confers, namely, that of being able to subject to enfilade, cross or flank fire other points or troops not in their immediate front, but they fail to make any use of their eyes to note the ground to their flanks and observe what is going on there. In South Africa our men, when committed to the attack, carried out this practice of firing and looking straight ahead so religiously that time after time they failed to notice the wily but keen-eyed and practical Dutchman creeping up into good fire positions on their flanks. The officers were equally unobservant, and local fire positions which would, if seized, have greatly facilitated our operations, were repeatedly neglected, unobserved, or passed by in the fatuous following of a method of shooting long out of date, and imbued with the crude idea that they must look straight to the front for the enemy and nowhere else, our officers and men waged a gallant but unequal combat with a more commonsense opponent. At the disastrous engagement, known as the Nicholson's Nek affair, our men occupied the southern end of a horse-shoe shaped plateau. The enemy opened fire from the northern, or toe-end of the ridge. Directing their fire on these and wholly absorbed in the movements of the Boers in their front, our officers and men were soon to be terribly surprised and overwhelmed by the death dealing and demoralising flank and enfilade fire which a few parties of the

enemy, creeping along to the re-entrants on the flanks, directed This was repeated scores of times during the upon them. war and our better disciplined but less practically trained officers, non-commissioned officers and men were nonplussed, demoralised and often defeated by their keen-eyed and more observant adversaries. Keen observation and acuity of vision are necessary to enable the men to quickly locate the enemy and shoot him. If the training in these points, however, is practically carried out in conjunction with minor tactical operations, it should be productive of much more than Officers and men who have been practically and systematically trained in peace time to look about them will, it is expected, do so in war. Their vision and interest, as they have hitherto been, will not be restricted to the narrow field to their front. They will, when on the defensive, not only direct their fire on any particular section of the enemy's troops who happen to disclose themselves in front, but will note the features of the landscape to their flanks, their rear, and to their right and left fronts. Their acquired habits of observation will impel them to be constantly seeking in all directions for signs of movement that may indicate the approach of other parties of the enemy seeking to circumvent them. On the offensive, from the moment they move forward from cover and extend for the attack, they will be all eyes and ears, seeking eagerly for pieces of ground to their right and left, and keenly endeavouring to detect movements of the enemy seeking to forestall them. Their practical knowledge of ground acquired from their excursions into the jungle in peace will enable them to quickly detect the points of vantage, the best fire positions, and the way to approach them. They will look to their right and left, and alive to the immense advantage to be derived by a sound system of co-operation and training in mutual fire support, they will seek opportunities to assist their less well-placed comrades.

These are some of the advantages to be derived—and they are tremendous advantages too—by a sound methodical, and

progressive system of training in observation and knowledge They are the factors which if appreciated at their true value will contribute largely towards making our Army, small in numbers, equal if not superior to double the number of mechanically trained conscript armies of the Con-With his thirty marksmen and first class shots tinent. thoroughly and efficiently trained as individuals to judge distance, to observe, and to make use of ground, the company commander can now proceed to the equally interesting and if practically carried out equally important individual off-the-Encouraged by the feeling that his men are range shooting. so equipped and that they will acquit themselves well, he should enter on this part of the soldier's training with confidence and pleasure, and his men, confident in the knowledge that they can quickly locate the enemy, estimate the range, and make an intelligent use of ground, will be keen to show that provided the opportunities to use ball is given they will justify his most sanguine expectations.

## CHAPTER VIII.

That the present conditions of warfare demand a high standard of efficiency in the ranks is undeniable. The wide extensions necessary, the dissolution of tactical units, the necessity of utilising ground and cover which does away with rigid lines, the deadly accuracy of fire which forces leaders to take cover as well as the men, the unceasing rattle of musketry, maxims, and pom-poms, which drown the sound of a leader's voice, the impossibility of maintaining communication by signalling flags or heliographs and the unusual losses among leaders who endeavour to encourage their men by example, each and all have forced us to see that the individual soldier will, if thoroughly trained, play a more prominent part in the campaigns of the future than has ever been the case in the past. It cannot be said that those responsible for the training of our Army have been ignorant of or have neglected to realise and point out the importance of a careful and systematic individual training. For many years attention has been directed to the subject in the Training Manuals and in the Adjutant-General in India's annual musketry memoran-Notwithstanding these warnings and injunctions to secure a higher standard of efficiency in each soldier, the South African War was not far advanced when it became apparent that the men in the ranks were unequal to the requirements of modern warfare. The following true extracts from evidence given before the recent War Commission by distinguished officers whose opinions carry weight will show what I mean :---

(r) "Men must learn to move freely across country and be instructed as ground scouts, to take cover, to carry verbal messages, judging distance, reconnoitring, etc., and their intelligence developed out of doors. Indeed the main lesson of the war is that modern conditions of warfare entail higher training of the individual."

- (2) "The intelligence of the men is very good. I should like to say that I think it is often lost sight of that we do not recruit from the very highest standard. They are not Senior Wranglers, and I often hear grumbling about their intelligence. They vary a good deal. If you go down the ranks and ask a man a question he will answer it and grasp what you are driving at, another will look aghast."
- (3) "I think it is of great importance to begin at the beginning of his military service to make the individual man independent and self-reliant, capable of finding his way about and of looking after himself in every way, such as cooking in the field, sufficiently expert as a shot to be able to hold his own, man for man, with any opponent, and sufficiently intelligent to be able when left to himself to carry out the orders of his superiors. I think we have been accustomed to dry-nurse the soldier from the start, he is accustomed always to look to his non-commissioned officers and to his officers for everything."
- (4) "At first officers and men were very stupid about taking cover. I have seen men halted on a rise within full view of the enemy when a few paces backward or forward would have placed them in shelter, the reason being that to have taken this step would have broken the dressing of the line. I have, too, frequently seen an outpost sentry posted on the enemy's side of a dark bush, when he could have seen equally well through it and been himself unseen, but all this changed after."

- "In regard to cover our troops failed from lack of (5) power to observe. They exposed themselves to the enemy's view. The British soldier we recruit, as a rule, has little power of imagination, he finds it difficult to realise that if he does not see an enemy standing up on the sky-line, he may be hiding behind a rock, this notwithstanding the training at Home, the officers' lectures, and the other means of inculcating this knowledge in the men. The fact is his mental preception is not up to the requirements, nor is his education. The fact is that a man at Home, if he wants his dinner, goes and takes it from the cook-house. If he is in the field he has to cook it himself, and it sharpens him up. And in the same way if he wants to put a new helve in his axe, he goes to the store at once and demands one, and gets it. field he has to go and cut a piece of wood that will fit the axe; he is taught that on service he learns his needs and how to meet them. It is quality we want, not quantity. We are very unlikely to attack any continental power -I mean to say our business is India and South Africa: but we must have an expanding nucleus, and the more intelligent and highly trained our men are the better it would be."
- (6) "The education of the soldier to a high sense of national honour and responsibility must be a prominent feature in his training from his earliest school days."
- (7) "Intelligence without careful training will not make a good soldier. The more intelligence the better provided it is not obtained at the loss of discipline and physique."
- (8) "The war has brought prominently to notice the necessity in our training of cultivating and improving the individual intelligence of the private soldier without impairing the discipline which is as essential now as it ever was. Intelligent leading on the part of

- the officers, and implicit obedience and faith in the officers are required."
- (9) "The intelligence of the soldiers is that of their class; it is not to be expected that men who join, as a proportion do, absolutely illiterate, will develop into very intelligent soldiers. But there is generally a fair proportion, and in some regiments a large number, who are sharp and intelligent, and can be counted on as leaders. Careful, intelligent, and untiring individual training on the part of the officers is the best preparation of the soldier for his duties in war."
- (10) "I think that the margin of efficiency has been so enormously increased, and the difference between the highly trained soldier, and the poorly trained soldier, especially with these modern firearms, is such that it would pay best to have a man who could take the full advantage of his weapon and the ground."
- (11) "Now the moment has arrived when the question will have to be faced as to how far the necessity of a very high standard of individual training in the men, as well as in the officers, is compatible with the maintenance of large armies of short service con-If the experience of the South African War scripts. can be taken as a guide, the big battalion phase is about to pass away, and we are entering upon a period when the efficiency of an army will depend far more upon the morale and high training of the individuals who compose it than upon the mere numbers of these individuals who may be available. I believe that an army composed of individuals each so highly trained as to be able to take full advantage of the terrain, and of his wonderful modern weapon, and each animated by a morale and trained to an efficiency which will make him capable of acting in battle on his own initiative, will break through, scatter, and

demolish less efficient opposing forces, even greatly superior in numbers. No doubt this principle will be more strikingly exemplified in the case of such countries as we are accustomed to wage war in, than in the comparatively small, enclosed, and highly civilised countries of Europe. For where numbers are limited by questions of transport and supply, the folly of despatching anything but superlatively good soldiers is accentuated. It must not be supposed that in insisting upon the necessity for individual initiative and training, I wish in any way to ignore or depreciate discipline. Discipline there must be but it must be discipline on a higher plane. It must be the aim of the new discipline to make the private soldier capable of keeping steadfastly in mind for the whole of the day, or even for several days, and striving with all his might to carry out what he has been told by a superior who is no longer present, and who, for all he may know, is dead. Within a mile of the enemy and in open country, it will be no longer possible for the brigade-major to gallop up to the colonel with a folded piece of paper prescribing his next movement. Nor can the colonel send his adjutant to tell the captain to direction or reinforce. Within a thousand yards of a hostile position the captain can hardly hope any longer to influence the company as a whole by orders, or even by personal example, and the idea of swarms of men surging forward by words of command to the assault of a position is one that we should do our best to encourage among our potential enemies. a battalion can, in open country, succeed in getting within 500 yards of the enemy's defensive position, it will have done all it can do as a collective body. The men will be lying widely extended and pinned down to some small depression, or bits of cover by

streams of bullets passing just over them. At some part of the line, however, it is almost certain that a brook, a ditch, or some imperceptible fold of the ground will give some trifling shelter to a further advance. Half a dozen private soldiers may find themselves at this spot. If they possess sufficient training to recognise the possibilities of their position, together with sufficient new discipline, initiative, and enthusiasm to take advantage of it, they will creep They will be followed by others, and if, as a result, the enemy's line is penetrated, even by a few men, the power of their modern armament will make their flanking fire so demoralising and effective that the position will either be abandoned forthwith, or much attention will be concentrated on the intruders, that an assault may become practicable all along the line. It will be evident that to do this the mind of each man must be imbued with a firm conviction that the other men of his own rank, whom he does not see, and who may be anywhere within the next few miles, are also doing the same thing and trying to seize hold of every opportunity; in other words active discipline on the higher plane really consists in an unalterable confidence that it also exists in others, and that the individual is not risking his life for nothing. Not so trained he will tend at the first difficulty to remain lying under cover because he has no conviction that his comrades, wherever they are, are not likely to be doing much more than he is doing, and he is not imbued with the sense that he is giving his comrades away by not doing more."

(12) "Dispersion, concealment, and intelligent use of the ground are also essential for success for either the attack or the defence, and this demands a higher standard of individuality. Granting, then, that the

military supremacy of the future must be sought through the medium of a high standard of individual efficiency rather than by the preparation of masses of semi-efficients, it is clear that it cannot pay to keep soldiers who are only partly educated up to the potentialities of their armament. The ideal trooper should be able to travel by day or night, guiding himself by the compass, map, or sun. He should be a finished horseman and a crack shot with the If not properly educated before enlistment, the rifle. Army must put the schoolmaster to him and see that he is able to understand things just as the gymnastic instructor must see that he is able to do things. should be able to shoot up to the standard of excellence which is expected from the chamois hunter, and march 30 miles when required. He should have a good idea of terrain and cover, and of entrench-It is impossible to teach such things in the polo or cricket field. The soldier can hardly be expected to take much interest in soldiering or to see the sporting side of it when all his training is carried out on make-believe lines. Good training grounds are necessary. In war we revert to primitive conditions, and every sort of subtlety or trick must be recognised as part of the game. Such a trifling device for instance, as constructing lines of entrenchment precisely at those spots where there is no intention of posting troops may cause the enemy to misdirect the whole of his preliminary artillery fire. It is an idea that would readily occur to a school-boy, but such points seem sometimes to be considered frivolous, irregular, and almost derogatory to the regulation military punctilio. War is a game just like any other game, only the stakes are tremendous; sporting proclivities, shooting, polo, hunting should be encouraged. Even a few men accustomed to

shikar would make short work of double the number of continental conscripts. Quality above quantity should be our motto. If the man in the street were asked he would say 'I deduce from the War that barrack-square drill, and pomp, and pipe-clay are no use at all, and that a few farmers possessing individuality, horsemanship, and marksmanship proved man for man more than a match for you.' In our Native Army training, education, initiative, responsibility, and individuality have been neglected and repressed."

- (13) "The highest praise I can give the regimental soldier of to-day is to say that in no single respect is he inferior to his predecessor, and that in some he is greatly superior. He is more intelligent. is more temperate. He knows his duties better. He has more self-respect and he is more amenable to discipline. As a fighting man, however, he was not so expert when he first met the enemy as he might have been. His individuality had been so little cultivated that his natural acuteness was checked. and his want of resourcefulness was marked, especially at the beginning of the campaign. He was the exact opposite of the Boer, especially in his want of · knowledge of the ground and how to utilise it and also in his defective powers of observation. shooting cannot be described as good. Steadiness and a disinclination to waste ammunition were always observable, and there was no real marksmanship, capable of seizing fleeting opportunities, and attaining good results under difficult and unfamiliar conditions. The shooting at short ranges where battle generally resolves itself into a long fire fight between two parties of skirmishers more or less under cover was effective, and at long ranges the distance was seldom accurately estimated."
- (14) "The discouragement of individuality and the practice of training men to work under all circumstances

in numbers and to follow precise rules is to blame. man should be taught to ride as an individual and not as one of a squad, and the same with horse management. Until the soldier is held responsible for, and so takes a personal interest in, the condition of his charge, until he learns to rely on his own common sense and experience, not merely on the orders of his superiors, our horsemastership will be indifferent. Nor is it expected that he will excel either as a scout or a skirmisher, that he will attend to sanitary precautions, or become a master of his weapons, if he is not accustomed to use his own common-sense and to take a personal interest in his own training as a skilled fighting man. It follows from what I have just said that our men show little judgment or skill in the use of entrenchments and cover. Entrenchments planned by the officers, and constructed systematically under their supervision, were generally satisfactory, but when the work had to be left to the initiative of the men, it was exceedingly badly performed. Individual skill in improvising cover, so conspicuous among the Boers, was altogether wanting in our regulars, whose only idea in building entrenchments seemed to be to obey orders, and not to secure their safety. A most noticeable instance is Nicholson's Nek. The stone shelters raised by individual men, or by small groups of men, were almost pitiful; they were so insignificant and badly placed. In the attack the men were even more oblivious of cover, and on outpost duty it was long before they learned the importance of invisibility. This was certainly not as it should have been. Defiance of danger is a fine attribute, but a force attacking a position, if it takes every advantage of the ground, and takes care not to expose itself, will probably attain its object with half the loss it would otherwise incur. In most of these respects the improvement as the campaign went on was marked, and it was very clear that the men wanted only practice and experience to become first rate. In the later stages they showed more resourcefulness than at first, they were not so dependent on their officers, and they seemed to have grasped the spirit of individual fighting. And at the same time their discipline remained excellent. This, I think, is a clear proof that insufficient training, and not want of intelligence or keenness, was the reason that they still had something to learn when they took the field. Too much attention was given to uniformity and good order, too little to the development of the individual. It was not everywhere realised that the skill and aptitude of the scout and skirmisher are not less important than the steadiness and precision of the mass."

- (15) "I think the soldier requires more self-confidence, and more knowledge, and more of that reasoning power which comes from education."
- (16) "Opportunities were sometimes lost by the delay which invariably occurred before our men opened fire. This I attribute greatly to the strictness of fire discipline which our training enforces, and which, I think, should be somewhat relaxed. The soldier is not good at taking care of himself and looking after his health and comfort in bivouac and on the march, and he was generally ignorant or quite oblivious of sanitary precautions. The material is very good, but hard work and intelligent training is wanted to render it capable of answering every test. Before the war, in all the combatant branches of the service, mechanical perfection had been cultivated at the expense of individual resourcefulness."

The above sixteen extracts from the evidence given by many distinguished officers before the War Commission enables us

to form a reliable opinion as to what is required if our men are to acquit themselves well on service. One cannot help being struck by the unanimity of opinion that prevails as to the necessity for a higher standard of individual efficiency in our Army. Whether we shall be able to attain this much desired standard or not depends largely upon the individual efforts of even junior squadron and company commanders. It appears to me that before the man in the ranks can be considered to be efficient he must comply with the following conditions:—

- (a) He must be better educated in the future than he has been in the past.
- (b) His intelligence must be developed at every stage of his career.
- (c) He must be able to think and act for himself.
- (d) He must be able and encouraged to use his wits.
- (e) He must be trained and encouraged to be self-reliant and resourceful.
- (f) He must be more observant.
- (g) He must be able to realise the value of ground in his vicinity and know how to utilise it so as to minimise the effect of the enemy's fire and at the same time secure the best effect from his own.
- (h) He must be able to extemporise cover and entrench himself against frontal, cross, and enfilade fire.
- (i) He must be capable of estimating the range, of selecting his own target, of husbanding his ammunition, of noting the effect of his shots, and of directing his fire intelligently.
- (j) He must be able, in the absence of his leader, or when control is no longer possible, to go on fighting, maintaining his ground or pushing forward to other points of vantage from whence he can, with fire, assist his comrades to his right and left or counteract the ruses of the enemy.
- (k) His patriotic feelings must be aroused and he must be trained to a high sense of national honour.

- (1) He must be imbued with a profound confidence in the ability of his officers to instruct in peace and to lead in war.
- (m) He must participate in that mutual confidence which arises from a knowledge that each man in the Army is trained to the same standard of efficiency as himself, and actuated by the same exalted enthusiasm and ideals.
  - (n) His discipline must be on a higher plane than has hitherto been considered necessary, advisable, or even possible.

It is an extraordinary fact, but nevertheless an indisputable one, that the outbreak of war found the soldiers in the ranks utterly unfitted and incapable of contending with the exigencies of modern war. It was not for want of warning, for as I have already pointed out the annual musketry memorandums issued from Army Headquarters in India had repeatedly urged, and the training manuals published by the War Office had repeatedly insisted on, the importance of training the soldier to a higher standard of individual efficiency. The difficulty of finding officers capable of imparting instruction in such a manner as would force the men to exercise whatever thinking faculties they possessed; the universal failure on the part of senior officers to realise and inculcate the importance of the subject; the apparent immensity of the task, and the uncertainty and doubt as to what was actually required, due largely to a certain class of officers at Home who do nothing else but preach the doctrine of German imitation, had resulted, as was to be expected, in nothing whatever being done towards making the British soldier what he should have been, namely, the most efficient soldier in the world.

The · "Times" historian of war, in commenting on the disastrous affair known as Nicholson's Nek, says:—

"The history of that failure has been set forth in detail almost disproportionate to the general scope of the present work. But the detail may have helped to bring out the real

cause of this failure—as of so many another—the tactical inferiority, in 1899, of the British soldier to the Boer. Nicholson's Nek showed that that inferiority had diminished but little since Majuba. No one can read Mr. Carter's vivid narrative of the fight on Majuba and then read the account of Nicholson's Nek without feeling that the two are but slight variants of the same story. On the British side there is the same failure to occupy advanced positions from which the enemy could have been kept at arm's length, the same crowding of men at points that were never assailed, the same inability to modify the dispositions to meet the actual attack. sangars which directed the Boers where to concentrate their fire and sheltered them from observation, the harmless volleys which told them it was safe to advance, the driving in of the advanced party, the crumbling away of the resistance during the last half hour under a fire growing even hotter and hotter—the outlines of the two stories correspond. So, too, on the Boer side. Like Smit, whom he had followed up the slopes of Majuba, De Wet at once saw where the weak spot lay and rode his men round to it; what follows-the long hours of intermittent firing, during which the Boers picked off those who showed themselves incautiously, while they themselves invisibly crawled forward till they had enough men up to establish an overwhelming fire superiority at close range, the sudden development of intense continuous fire, all but the last shameful shooting down of hunted men-are the That last scene was averted by surrender. contest of riflemen against riflemen, and the better men won. It is true that the Boers were more rumerous, but of the 3,000 or more that in some sort took part in the engagement, 1,000 men at the most took part in the attack of the hill. many battalions of British infantry, unaided by artillery, would it have required to capture 1,000 Boers surrounded in a similar position?

"What is true of Nicholson's Nek is true in no small degree of the whole of the operations of that 'Mournful Monday.'

The Boers won on their fighting merits. Their mobility completely paralysed the cumbrous tactics of their opponents. Their extended order and skill in the use of cover frustrated the immense superiority of the British in artillery. The volume and intensity of their fire checked all attempts to force a way through the invisible containing net of riflemen. The fact that fully a third of the forces on either side were never engaged, and that the British casualties, apart from Nicholson's Nek, were insignificant, did not diminish the moral effect of the engagement. The battle of Ladysmith was the first on a large scale between British troops and Dutch burghers, and the first in which the two military systems were fairly matched against each other. And it showed conclusively that in the open field 12,000 British troops were not a match for an equal number of Boers."

Of all the caustic and scathing comments contained in the "Times" History of the War the most condemnatory of all is, in my opinion, embodied in the above quotations. twenty years of continuous drill, of manœuvres, of lectures, of marches, of barrack-room work, of orderly-room drudgery, of inspections and examinations, to be told by an impartial and disinterested historian-that the soldier in the ranks of, comparatively speaking, a long service army was neither equal, man for man, to the untrained farmer, nor up to the standard that the requirements of modern war demand, surely reflects not only on the system but on the capacity and ability of every officer in the Army. Supported, as this opinion is, by every line in the extracts from the Report of the War Commission given at the beginning of this chapter, it leaves no possible room for doubt that we had spent years in working hard at doing nothing, that our efforts, our zeal, and our intelligence had been misdirected, and that the men in khaki whose forefathers had rendered immortal "the thin red line" of British infantry were cowed and humiliated through finding themselves confronted by more up-to-date fighting men.

And although six years have slipped away since the enemy's guns on Talana told the world that one of the greatest

struggles of modern times had begun, I see but little evidence of an awakening. A great advance, it is true, has been made both in tactical and musketry training. Tactical examinations for field officers have been instituted. The time spent in practising the march past and other spectacular movements has been reduced to a minimum. The importance of cover is insisted upon. Field practices with ball receive more attention than hitherto, and companies go into camp for their annual training. All this is in the right direction but it is not all that is required. In many regiments, especially in the Native Army, the principle of directing everything by means of precise orders-of seeing that neither officers, nor men, deviate in the slightest degree from a carefully elaborated and well-defined routine, both in cantonments and in the field, and of a constant looking to and leaning upon superior authority—is still maintained. In the field the maintenance of regular lines, the insistence on regular distances between fighting lines, supports and reserves, and the movements of skirmishers up to within 200 yards of a position by words of command, in which it is assumed that success depends on courage and subordination alone, are still to be seen at any field day.

In the cavalry, movements entailing mechanical accuracy of alignment and knee to knee formations which have for their object the attack and defeat of the potential cavalry forces of continental powers with whom our cavalry never has been, nor ever will be, numerically sufficient to contend, and in the execution of which the intelligence and individuality of the soldier in the ranks count for nothing, still play a prominent part in the training of our Army for war. On the rifle range, in both cavalry and infantry, regiments are still imbued with the idea that a high figure of merit obtained by a system of constant interference and a grandmotherly supervision is a practical and adequate preparation of the men for war.

The parade ground still monopolises an undue proportion of the work and time of officers who find it a more congenial

resort than the distant hills and valleys. There are still those who, relying on the traditions and memories of the past, see in irregular movements and scattered formations, when constantly practised, an imaginable danger to discipline. Regularity of movement and uniformity of action are still in their eyes necessary to ensure that smartness and scenic effect which please the onlooker and unfortunately too often meet with the approval of inspecting officers. Further, regularity of movement and uniformity in the execution of the same are easily taught and are in agreement with the centralizing tendencies too often apparent in many battalions and regi-It is much easier to train the men as a body in companies and squadrons than as individuals, but in doing so commanding and other officers overlook the fact that in such cases the company or squadron is trained and the individual soldier, on whose efficiency so much depends in war, is neglected.

They also overlook, or do not know, that Cromwell's famous cavalry, perhaps in its time the finest in the world, acquired its merit from the high standard of individual efficiency insisted upon by that practical commander; that the French armies in the early part of the Revolutionary Wars and Napoleon's soldiers also owed the greater part of their astonishing success to their skill as skirmishers, to their intelligent use of cover, to the elasticity of their formations, and to the high standard of individual intelligence in the ranks which Carnot had ensured; that in the War of Independence, the American armies, though lacking both training and discipline, were often more than a match for our soldiers trained in the mechanical school of Flanders; that in the War of Secession the Confederate soldiers in whom individualism was innate, were, man for man, better fighting men than their European contemporaries; that the commonsense farmer of the South African Republic was in every respect, except perhaps in discipline, superior to the brayest barrack-square trained soldier we could produce; and that the intelligent Jap, with scarcely any

experience of war, was immensely superior to the ignorant and unthinking Russian veteran.

Time after time in South Africa they saw the frightful confusion and mixing up of units on the battle field, how leaders could not stand up to direct within 1,000 yards of a position, how control, however desirable, must inevitably slip away from even the most junior leaders, how manœuvring or even slight changes of direction soon became impossible and how every fight of the war eventually became a soldiers' battle in which the commanders were forced to rely on the ability of the simple Devonshire ploughboy or the humble Scotch farmer to uphold the honour of our flag and country.

They saw how impossible it was to move supports and reserves in regular lines up to the firing lines, how, during the day and within effective and decisive ranges, men creeping from cover to cover, from rock to rock, from bush to bush, mutually supporting each other with rifle fire, and assisted by intelligently directed covering fire from selected positions away to the flanks and rear, was the only possible way to gain ground to the front and to counteract or minimise the awful They saw at Modder River and effect of modern rifle fire. at Magersfontein how hundreds, nay thousands, of men soon found themselves in positions where they could neither hear any words of command, see any signals nor receive any messages except what they were capable of passing along themselves, and they learned at Spion Kop and Pardeberg that, whether on the defensive or during the attack, there soon comes a time in a modern battle when each maa must be left to fight on his own, using his ammunition as he thinks fit, selecting his own positions, advancing or moving to a flank according to his own lights, and relying on his own intelligence, readiness, resourcefulness, and sense of duty, fighting to uphold the honour of his regiment and the reputation of the glorious Army to which he belongs. The quick loading which the magazine renders possible, the flat trajectory of the smallbore rifle, together with the invisibility of the man who uses

it, have wrought a complete revolution in the art of fighting

His Excellency the Commander-in-Chief in India, in his celebrated memorandum on training issued on 11th April 1904, pointed out clearly and distinctly what this revolution is and how its demands can be met. It is impossible," says His Excellency, "to lay too much stress upon the necessity for developing individual intelligence and initiative to the fullest extent, subject, of course, to the requirements of disci-Without discipline all other training is useless, but in some cases there is a tendency to sacrifice that intelligent individuality, which is so needful in modern war, by carrying to excess the discipline of the parade ground. required is to aim at a happy medium which will combine these two important adjuncts of all training-discipline and individual action, for that Army will attain a decided superiority which has best understood how to train each individual man to use his own weapon, while at the same time he learns to follow the signs, obey the orders, and emulate the example of And the individual training must above all things be thorough. I would particularly impress this upon the officers of the Indian Army. I have been struck with the readiness with which native soldiers of all ranks acquire a soldierlike learning and learn such details of drill military training as can be acquired mechanically. if training stops at this point, and intelligent action does not take the place of mechanical obedience, such training will in time of stress be found little more than a thin veneer, and when suddenly confronted with unexpected situations, and without a British officer at hand to guide them, our Native troops may become confused and helpless or what they themselves would term 'gabrao'ed,' their merely mechanical training rendering them incapable of meeting unforeseen situations. Cavalry must still as ever be 'the eyes and ears of the Army.' Efficient scouting and reconnaissance are of supreme importance to the general in the field whose success

or failure often depends on the receipt of early and accurate information. For this he looks to his cavalry who, if they are not carefully trained in peace, will certainly fail in war, These duties, perhaps more than any others, call for the exercise of individual intelligence and resource-qualities which can only be developed by constant training and practice. infantry, the increased power of modern weapons necessitates much wider extensions in preliminary formations and in holding attacks than were previously realised or practised, and it is certain that even greater extensions than have hitherto been adopted will result in a fuller development both of rifle power and of the individual intelligence of the infantry soldier. Wider formations render it more necessary than ever to devote very careful attention to fire discipline-not only in the restricted sense of control of fire but in that wider sense which includes the training of the individual to open fire on his own initiative and without orders when those fleeting but all important opportunities occur which happen so frequently in war-and to constant practice in those formations which are found to admit of the fullest development of rifle fire. The infantry soldier should be a good shot. He should be encouraged to take an interest in his rifle, and by constant practice he should be led to appreciate its value and use. feeling can be induced in combination with musketry training a great step in advance will be made."

Here then we note the remarkable fact that, in the evidence of the officers before the War Commission, the opinion recorded in the Times History of the War, the injunctions contained in the training manuals, the repeated warnings embodied in successive musketry circulars from Army Head-quarters and the Memorandum issued by the Commander-in-Chief in India, there is not a single discordant note. The unanimity of opinion as to the higher standard of individual training required is remarkable, and in the face of such reliable and convincing views it seems hardly credible that the British or Indian soldier of to-day is little better than he was six years

ago. But it is so and the reasons for it are not difficult to detect. In my opinion they are as follows:—

- (a) There is a general consensus of opinion that the British soldier largely, and the Native soldier entirely, cannot, owing to their immature intellects, be trained to a high standard of individual efficiency or trusted to act on their own judgment.
- (b) Even if it is argued that the receptive faculties of the men are equal to the requirements, the British officer, whilst fully alive to the responsibilities of his office, does not know how to deliver lectures or conduct a lesson on any subject so as to force the men to think for themselves and so develop their intelligence.
- (c) The officers, with whatever worthy motives they are inspired, do not see how the soldier's love of country, his patriotic ardour, his sense of national honour and his exalted ideas of duty are to be inculcated and engrained in him.
- (d) In the absence of more detailed information and instructions the officers do not know how to proceed in the training of the soldier in acuity of vision and observation.
- (e) The "discipline on a higher plane," and in fact the whole subject, is either so mysterious or immense that it is but feebly grappled with or entirely avoided.

I sincerely hope that the above may not be taken as reflecting on the gallant band of regimental officers who have done so much in the past to promote the efficiency and welfare of the men in the ranks. It is to them and to no one else that we owe whatever measure of efficiency we have attained. Their unstinting devotion to duty, their unostentatious labours often under trying conditions of climate, their self-effacement, their pride in their companies and squadrons, their self-abnegation, their generous and lofty spirit which inspires the men with confidence, and, regardless of all worldly and selfish motives, their uncomplaining and conscientious performance of duty elicits the admiration of all those who come in contact with them. But that they could be expected to know what only a well trained teacher can possibly know, namely, how to impart instruction on systematic and methodical lines to men who are so much inferior to themselves in intellect is asking a great deal. And it is to assist them and, if possible, to make the path of future duty an easy and pleasurable one that these notes have been written.

## CHAPTER IX.

In the opening chapters of this work I have shown how those elements which multiply the strength of an army so much may be inculcated; how the self-sacrificing deeds recorded in our past history may be utilised to stimulate the enthusiasm of the men and imbue them with a desire to emulate the deeds of those who have done so much for England; how the patriotism of the present may be stimulated by the memories of the past, and how it is by an unshaken courage influenced by just and estimable passions, exalted enthusiasm animated by a profound devotion to their beloved King and country and by noble, heroic, and disinterested exertions alone that they can hope to enrol their names upon the list of England's I have shown there how the conduct of those men who fought at Minden, Albuera, Waterloo and Inkermantheir high sense of military duty, their instinctive principle of courage, their uncomplaining fortitude, their constant desire to uphold the honour of their regiment, their moral resolution, their silence under privation, their constancy under danger, their firm resolve to defend their country's cause and their personal attachment to the Throne-may be utilised to excite that national enthusiasm and preserve that national spirit upon which not only the success of our soldiers but the destiny of our country depends.

In chapter VII I have shown what is required under the heading of observation and how it should be taught. If this chapter has been carefully perused, its full extent grasped, and the training carried out carefully and persistently, the intelligence of the soldier will be stimulated, his thinking faculties aroused, his knowledge of ground increased, his eye for country improved and his power of giving expression to

his thoughts considerably enhanced. The advisability of associating judging distance with shooting, the extreme importance of the subject and the methods by which a high and practical standard can be attained have been pointed out, and notwithstanding opinions to the contrary, I feel confident that the soldier, however deficient in knowledge, will, if properly handled, prove more than equal to the demands of the most exacting.

I now turn to discipline and I say, with feelings of pride, that on this question and on this question alone I never have, and I never shall, share the misgivings of those distinguished officers who gave evidence before the War Commission, and who seem to fear that an intelligent individuality is incompatible with the kind of discipline required for the good government and efficiency of our Army. It is either not known or it is generally overlooked that the greatness of a nation and the success of an army depend more on the characof a race than on discipline and training. grand peculiarities of our race are its energy and perseverance; elements which have contributed so much to our national and individual success in the past. gleaned from trying campaigns and scores of battle-fields in Europe, Asia, Africa, and America, prove that our simpleminded soldiers possess a constancy in danger, a fortitude under privation, a doggedness in adversity, a modesty in success, a humanity in the hour of victory and a stubborn and resolute courage that hardens under the impact of disaster such as has seldom been displayed by the soldiers of any nation in the world's history. Whether these peculiarities may be attributed to the animating influence of our free institutions and a long course of unparalleled and almost unblemished glory, or whether they are merely due to some inherent peculiarity of our race I do not profess to be able to I feel the greatest confidence, however, that any officer who takes the trouble to follow our Army through its centuries of glorious effort-to camp with it in the forests of

North America, to fight with it over the glorious battle fields of Spain, and to share with it its immortal triumphs in Central Europe, Belgium and the Crimea—will rise from the pleasantest labour of his life, firmly convinced that our Army with its glorious past, its historic training and its extraordinary traditions of advancing and fighting in a line formation, is gifted with qualifications for fighting in thin and extended lines such as is possessed by the army of no other nation in the world.

For nearly two centuries the Army has struggled in vain to free itself from the cut-and-dried methods of Continental Armies. Officers of known and tried experience repeatedly endeavoured to shake into intelligent individuals the rigid battalion lines. Time after time men whose experience of fighting extended from the Mississippi to the Ganges have loosened the formations and given their men what they so much desired, elbow room to fight, and never has their confidence been misplaced or their judgment belied. Time and again the men in the ranks, panting for the chance to show their worth, and impatient of the mechanical precision which brings them down to the level of the most effeminate races, shook themselves free and won by their individual, unaided, and often quite undirected efforts those soldiers' battles which figure so prominently in the records of our Army.

"With the first shots of the enemy on the Monongahela," writes Fortescue in his history of the British Army, "the Virginians alone, who were accustomed to such work, kept their presence of mind, and taking shelter behind the trees began to answer the Indian fire in the Indian fashion. A few of the British strove to imitate them as well as their inexperience would permit, but Braddock would have none of such things. Such fighting was not prescribed in the drill-book nor familiar in the battle-fields of Flanders, and he would tolerate no such disregard of order and discipline. Cumberland had selected him on account of his success in Flanders but he forgot that Fontenoy was simply an elaborate parade-

movement, and that the battle-fields of a Prussian Army and the adversaries of a Prussian general were to be found on the familiar lands of Silesia, Brandenberg, and Saxony, whereas the fighting grounds of the British were dispersed far and wide among distant and untrodden countries and their enemies such as were not to be encountered according to the precepts of Montecuculi and Turenne."

Braddock was as brave an officer as ever wore a British uniform. His men were of the same fighting type as followed Howe on the "Glorious First of June," but the enemy, lurking behind trees and bushy ridges, themselves invisible, poured in a fire so rapid and so deadly that our gallant men, massed together, fell in heaps. For a time discipline to some extent prevailed, and crashing volleys were fired in futile fashion into the woods whence came the pitiless hail. But when the slaughter increased and no enemy could be seen, confusion seized upon the troops, who, huddled together in small knots, fired wildly in all directions, killing more of their comrades than the enemy. Officers showed the noblest devotion, vainly endeavouring to lead parties of their men against the hidden foe but invariably falling in the very act, picked off by the marksman's bullets. Out of 1,400 picked men 860 were either The narration of such events as this killed or wounded. moves to pity the hearts of every regimental officer in the Army. The men struggling to free themselves from the bonds of a mechanical discipline, and seeking to make use of cover such as the trees afforded, are forced into the ranks, there to add their names to the long roll of England's humble heroes. Loading by word of command, firing volleys by word of command, closing in to fill the gaps made by their falling comrades, silently, helplessly, yet nobly laying down their lives according to regulation and established rule. But, as has always been the case, there were statesmen in England, and soldiers in America, who, rising superior to all misfortunes, were capable of grappling with the most extraordinary vicissitudes of war. A couple of years after Braddock's disas-

trous and gloomy failure Pitt rose to supreme power in England, and the fight with France for North America rapidly assumed a different aspect. By the beginning of 1758 the magic of his inspiration had begun to work, and the agents of his vigorous policy both at home and abroad, were feeling the influence of his lofty enthusiasm. He was one of the greatest friends the soldier in the ranks ever had. In the selection of his officers Pitt threw precedent to the winds, ignored seniority, rank and influence, and, as far as was humanly possible, made his selections and promotions by merit alone. Brigadier Howe was selected to act with Abercrombie, to counteract the lack of ability suspected in the latter commander. He was thirty-four years of age, a promising officer, and beloved by the Americans. "The noblest Englishman that has appeared in my time and the best soldier in the British Army," wrote Wolfe, who knew him well. And Wolfe was not far wrong, if by a good soldier, we mean an officer who trains his men to fight so well individually that they can campaign with success in any country and against any enemy. "Having arrived in America in 1757," says Mr. Fortescue, "Howe had been at pains to learn the art of forest warfare from the most famous leader of the Provincial Irregulars. He threw off all training and prejudices of the barrack-yard, joined the irregulars in their scouting parties, shared the hardship and adopted the dress of his rough companions and became one of themselves. Having thus schooled himself he began to impart the lessons he had learned to his men. He made officers and men, like the Regular and Provincial troops, threw off all useless encumbrances, he cut the skirt of their coats and the hair off their heads, browned the barrels of their muskets, clad their lower limbs in leggings to protect them from briars, and filled the empty space in their knapsacks with thirty pounds of meal, so as to make them independent for weeks together of convovs and supplies. a word he headed the reaction against the stiff, unpractical school of Germany so much favoured by Cumberland, and

tried to equip men reasonably for the rough work that lay before them. Such ideas had occurred to Bouquet and Forbes. There was a general revolt of all practical men against powder and pipe-clay for bush-fighting."

Unfortunately Howe had neither independent command nor did he live long enough to reap the reward of his labours. He was killed the following year when leading his scouts and skirmishers in an advance on Ticonderoga. In his instructions for browning the rifle barrels, for making the men more mobile, for practising them to fight in extended lines, for making them trained scouts, and in fact in almost everything he did, he anticipated the views of those officers who gave evidence before the South African War Commission by a hundred and fifty years. Nor was Brigadier Howe the only practical soldier in the Army at that time. Amherst, though not a brilliant general, had sufficient common-sense and judgment to see that if the British soldier is to honourably do England's bidding in every corner of the globe, he must be trained on broader lines than the mechanical methods of Turenne permitted of. He saw that in forest fighting the British rank and file had much to learn from the Colonials, "and it fell to him," says Mr. Fortescue, "to teach his troops greater freedom and independence in action 'without simultaneous relaxation of discipline. He overcame all these obstacles, in his quiet, methodical way. Discipline never failed, for Amherst, though no martinet, could be inexorably severe. Special corps of light troops and marksmen were organised, and the drill of the whole Army was modified to suit new conditions. It was in fact Amherst who showed the way to the reform afterwards carried out by Sir John Moore at Shorncliffe, of reducing the depth of the ranks to two men only. Amherst never fought a great action, so his improvements were never put to the test, but this does not impair his credit as a soldier of forethought and originality."

Although Amherst never fought a great action, his work was such as tries the discipline of an army quite as much as

the moving events of a battle-field, and it is a remarkable tribute to the soldier in the ranks to say, that during the six years of weary marching through lonesome woods,—fighting under novel conditions in which ambush and surprise were the daily features-which finally culminated in that glorious triumph on the Heights of Abraham, and which gave to the Anglo-Saxon race the continent of North America, there was not a single blot to mar his reputation. "In truth," to again quote from the History of the British Army, "though there were lessons which the British might learn with profit from foreign nations, both as to what they should imitate and what they should avoid, the best of their instruction was that which they gained from their own hard experience in lands remote from Europe. The influence of Frederick the Great was perverted in great measure for ill to the Army. The King and Cumberland had both of them a passion for minute details of dress, facings, lace, buttons, cockades, and the like and were dear lovers of the tight clothing and inelasticity of movement which characterised the Prussian School. There can be no doubt, on the other hand, that strict insistence on cleanliness and smartness is indispensable, and that correctness and uniformity of dress are valuable aids to discipline and esprit de corps. A few minor distinctions in uniform such as are calculated to give the men a pride in their particular regiment or branch of the service, are both desirable and harmless, but the powdering of hair, the docking of the old fashioned serviceable coats, and the straightening of every article of raiment were no gain to efficiency, no improvement to health, and in the eyes of Englishmen, at first, no embellishment as to Had the King turned his thoughts to diminishappearance. ing the weight on the soldier's back, or devising suitable equipment for tropical climates, he might have saved lives untold. The Army's best lessons during the period came not from Germany but from America, not from Frederick the Great, but from Howe, Washington, Wolfe, Bouquet and Amherst."

But the best lessons—the lessons acquired by our own trying and often bitter experiences—counted for little with those to whom a well dressed and properly powdered soldier was the aeme of perfection. The Peace of Paris was no sooner concluded than the teachings of Amherst, Howe, and Forbes were pooh-poohed and ridiculed as being the evanescent opinions of immature minds, and the barrack-square and the barrack-room again became the training grounds for troops whose duty calls them to every nook and corner of the globe. It required but a few years to knock out of the way the bad methods of fighting acquired on the frontiers of Canada, and the outbreak of the American War found our generals and men forced to wage a bravely contested but unequal conflict with a more common-sense and practicial method of fighting.

"The methods of Flanders," says the History already quoted, "were impossible in the interminable forests through which Burgoyne had advanced, and cunning marksmen hidden in trees had thinned his numbers, particularly in respect of officers, far more than the musketry of the American platoons. Drill and discipline could make the British soldier stand and be killed, but they could not avail him to silence the unseen rifle which, safely ensconced beyond the range of his own musket, struck down first his officers, then his sergeants, and The British, therefore, had no alternative but then himself. to learn from their enemies, to pit individual against individual, marksman against marksman, irregular fighting against Tarleton, Simcoe, and Ferguson irregular fighting. met the Americans with their own weapons, they had suffered severe defeats it is true, but they had achieved also remarkable successes. The methods of their irregular corps also were to a great extent forced upon the whole of the British troops, owing partly to the deadly marksmanship of the American riflemen, but still more to the fact that almost every important action of the war was fought on heavily wooded ground. Thus the British infantry in the field in 1780 and 1781 had lost in great measure, if not entirely, the solidity and precision

which had distinguished it at Fontenoy and Minden. The depth of the ranks had been reduced from three to two, the files had been opened, and all movements had been conducted loosely and irregularly with an independence of action on the part of small units and of individuals which was wholly at variance with the accepted notions of Europe. This looseness of formation had been further encouraged by the very small part played by cavalry, as distinguished from mounted infantry, throughout the operations. It is true that Tarleton, more conspicuously the American Colonel Washington, had occasionally wrought great results by the charge of a mere handful of sabres. It is true also that Morgan's solid array had not only repulsed but annihilated Tarleton's thin attacking line at Cowpens, and that Clinton had ascribed the whole disaster to Tarleton's reduction of the orthodox three ranks to two. But none the less the British officers returned from America with a fixed idea that the firearm was now all in all, that the shock of the bayonet was now so rare as to be practically obsolete, and that the greater the frontage of fire that could be developed, the better. They were therefore disposed to abolish the third rank in the infantry altogether, since its fire, if not positively dangerous to the two front ranks, was wholly ineffective, to shorten the old musket, which had been made long on purpose for use in three ranks, and to devote the weight thus saved to enlargement of the bore, and finally, to maintain the loose ordering of rifles--or, in other words, a wide lateral interval between man and man-in order to give every individual greater freedom of action."

Once again our gallant Army goes through the ordeal of a long and trying campaign in which not only the experiences of generals who fought ten years before on the frontiers of Canada are confirmed, but an insight into the requirements of modern war is obtained, and the capacity of the British soldier to combat them is amply demonstrated. That the firearm plays the leading role in war, that the bayonet charge is prac-

tically obsolete, that wider frontages which permit of greater development of rifle fire are necessary, that the rigid lines should be loosened to give greater scope to the individual soldier in the ranks and that the British soldier no longer requires the moral support of three lines-these, and many other lessons of equal import in the training of our Army for war, were garnered by our generals on the splendid fighting grounds of North America more than a hundred years before the battle of Talana was fought. But the same vicious influences were still at work and tradition dominated where enlightened experience should have pressed its case upon every officer in the Army, so that it could neither be gainsaid nor Fettered by 17th century prejudices, afraid of anything new or original, incapable of independent thought, and ignorant of the sterling qualities of the British soldier, an influential number of officers at Home- alternating between Hyde Park and Potsdam, and borne complacently along on a fetid stream of imitation-continued to exert their baneful influence and stifle all attempts at progress. The experience of tried and capable generals in the field was ignored, or their advice belittled by those who found the parade grounds of France and Germany a more congenial and illuminating resort than the bushlands of the New World. In constant dread of the bogey of indiscipline which existed in their imagination only, and terrified at the idea of delegating to juniors a single iota of responsibility, or to the men the faintest semblance of independent action, these "old women in red ribbons" still insisted that an army of well-powdered and well-buttoned soldiers, ruled by a cruel and degrading system of discipline, represented the highest ideal of military efficiency. They were either ignorant of, or they intentionally refused to acknowledge, the fact, that although the British soldier had shown his remarkable aptitude for independent action in North America, and had distinctly improved as a fighting man as the war went on, he had given his officers less trouble, and had been guilty of less insubordination than his predecessors in Flanders.

The lessons learnt in America were forgotten, the experience gained on many a hard-fought field treated with scornful disdain and the Army again assumed a character neither consonant with the characteristics of its men nor its past traditions. But brighter days were in store for it, and the iron resolution of the Duke of Wellington and the genius of Sir John Moore gave our soldiers a pre-eminence among the fighting men of Europe such as they had not enjoyed since the days of The former, relying on his intimate knowledge of Cromwell. the accomplishments of the British soldier, acquired during his short but brilliant career in India, felt that he could trust him to meet with success, in two lines, the massive columns and skirmishers of France. He was not mistaken, and time after time the victors of Marengo, the heroes of Italy, and the conquerors of Ulm and Jena turned their backs in dismay on the thin red line of British Infantry. The latter with his varied experiences in different parts of the world had sense enough to see that the British Army, if it is to be of any practical utility, must be prepared to fight in almost any country in the world, and contend with almost every known form of tactics. Fully alive to the fact that the English feeling for law, duty, and discipline permits of thinner lines, greater elasticity in movements, and a delegation of responsibility to junior officers and men such as no other nations dared at that time attempt, he entered with zest and pride into the training of the famous regiments of the Light Division. Practising them over different varieties of ground, accustoming the men to work in wide formations, giving his battalion commanders greater liberty of action, and insisting on company officers being intelligent and zealous assistants instead of cringing subordinates incapable of even the slightest independent effort, he infused into the gallant regiments of the Light Division a freshness and vitality that made them the pride of the British Army. And throughout the long and trying struggle in the Peninsula, whether in the skirmishing line or on the exacting duty of outposts, their discipline never

failed. The Light Division in warlike fame is worthy to stand beside Cæsar's Tenth Legion, Alva's Spanish Infantry, or the Old Guard of Napoleon, and it was the British soldier's peculiar qualities—his superiority of moral temper, his unequalled pride in his regiment, his unbounded confidence in the integrity of his officers, his innate respect for law and order, and his peculiar capacity for obedience—which, justifying, beyond all expectations, Sir John Moore's prescience and forethought, rendered possible the immortal achievements of Crauford's Light Division.

Nearly a century had rolled away—a century studded with British campaigns in every nook and corner of the world when the distant and unexpected booming of the guns on Talana ushered in one of the bitterest and most trying conflicts of modern times. Stretching over three long and trying years, waged over enormous areas, conducted against the most mobile, the most ubiquitous, and the most intangible foe that any nation has ever had to contend with- a nation equal to the Sioux in cunning, to the Pathan in acuity of observation, to the frontiersmen of America in field-craft and to the bushman of Australia in knowledge of ground, in frugality of living and in hardihood of frame, the long struggle for British rights and freedom in South Africa was the most penetrating ordeal the soldiers of our Army have ever had to submit to. Yet any impartial critic will admit that from amidst all the vicissitudes of that trying conflict Tommy Atkins emerged with a reputation not only unblemished but sensibly increased. Whatever his shortcomings were, they were the result of his faulty and meagre training in peace, which again may be attributed to that persistent wavering between what the British soldier is capable of and what the German General Staff considers necessary or advisable. withstanding the guerilla nature of the fighting, the continuous round of long and heart-breaking marches by night and day, the wide extensions necessary, the scattered detachments all over the country, and the demoralizing example of thousands of well-intentioned but poorly disciplined Colonials, the British soldier—the man we love so well—"for indomitable courage, for uncomplaining fortitude and implicit obedience was beyond all criticism." In fact, in respect for authority, in faith in his officers, in pride in his regiment, in soldierly bearing, in discipline, in valour, in manliness, in love for the Motherland, in devotion to his beloved King and in every soldierly quality except tactical skill, the British soldier proved himself over and over again to be the finest steel ever forged in the flames of war.

## CHAPTER X.

But the discipline which, under such protracted trials and hardships, rendered possible the exemplary conduct of the regular soldier during the war, contributed more than anything else to his deficiencies as a fighting man. It was the discipline of Waterloo, absorbing all individuality, requiring a word of command for every movement, and even forbidding the companies, half companies or sections to fire or cease fire except with the sanction of superior authority, that permeated every rank in the Army in 1899, and reduced to a minimum the fighting capacity of the individual soldier. It was the mechanical discipline of the Crimean days, in fact I might say of the days of Frederick the Great-the product of a continuous round of parade ground drill, of deployments to the right and left, of wheeling into line to the right and left with mechanical precision and exactitude of dressing and interval, of a constant endeavour to make battle conform to the parade ground—that was still the ideal of our Army at the outbreak of the war in 1899. Not only in the infantry but in the cavalry as well, and a squadron commander ran the risk of being considered inefficient or incapable if, when his squadron was drawn up in line, a single horse was foolish enough to push his nose out two inches in front of his right or left hand neighbour; and wearisome hours, days, months, and years were spent in endeavouring to maintain an exactitude of alignment, both at the halt and on the move, a regularity of movement, and an awe-inspiring appearance which though dazzling to the eyes of the onlookers, and pleasing to the commander, gave neither scope to the exceptional qualities of the British soldier in the ranks, nor opportunity to the leaders to show that they possessed either commonsense or intelligence.

It was the barrack square discipline by which everybody moved in accordance with a carefully elaborated and punctiliously defined routine which emanated from, and demanded a continual dependence on, superior authority. It was the discipline of the company, in which the individual in the ranks was as dumb and listless as the works of a clock which when wound up move automatically at the instigation of the mainspring or company commander. It was the discipline of the troop in which the men fell in for stables by order, moved to their horses by order, picked up their grooming brushes by order, rubbed the horse's neck for five minutes by order, then his near side, then his off side, then his near fore, then his near hind, and so on until the animal might well have imagined itself a valuable watch in which each part has to be regularly and scientifically cleaned before it will go; in fact the troop groomed the horses and the men were as the mere mechanical component parts of a locomotive which are started into a clearly defined and regulated activity by the action of the driver or troop commander.

The men were considered by almost every officer in the Army to be quite beyond the pale of rational and thinking beings and whatever natural faculties they possessed on joining soon perished from disuse. Our methods of training and preparation or fighting were the dogmatic teachings of a by-gone age, the acquired lessons of unseasoned drill, the accepted formulas of collective movement, submerging the individual soldier in the mass, subordinating action to one mind and one command, and calculated to produce, as they often did in South Africa, inertness and helplessness whenever circumstances became such as previous precept had not contemplated. The psychology of the breech loader and smokeless powder battle had not been studied, and wherever it was, intelligence and individuality were relegated to the background, not because the soldier was possessed of neither but because he was considered incapable of using them with discrimination. But the war in South Africa convinced all those able officers who gave evidence before the

War Commission that in the conflict of nations the individual soldier in the ranks will play a greater part in the future than he has ever done in the past. The long and momentous struggle in the Far East has amply borne out these opinions, and it is to provide for this that a higher standard of discipline is required. A great deal of uncertainty as to what this means, how it is to be attained and the advisability or otherwise of attempting it with our men, is evident on all sides. This I attribute almost entirely to the lack of knowledge as to what our men have, when left to themselves, done in the past, an ignorance of the peculiar qualities of the Britisher as distinguished from others, a general fear that the extension of responsibility will loosen the bonds of discipline, a want of confidence in the men and exaggerated and mistaken ideas as to the amount of freedom the new discipline requires before it can become effective.

Let us turn for a moment to one of the darkest periods in the history of our Navy, and we shall see that even when cut adrift from all authority our men possess a peculiar and innate respect and regard for law and order and a loyalty to their country such as few others are capable of. I refer to the mutinies at Spithead and the Nore in 1797. In the first place it must be observed that the men did not rise in rebellion because they were flogged every day of their lives, or because in dozens es ships the apathy and neglect of their officers permitted their dying in hundreds from sickness and disease which generous hearted and noble minded men like Nelson and Collingwood proved themselves capable of averting. They did not howl for Equality: they had no truck with Fraternity, and they—the men who in the hour of England's peril gave their lives freely and ungrudgingly for England's sake-hoisted no standard of the "Rights of Man." They merely asked for better food and enough to eat. But in their demands was one, the reasonableness and justice of which must appeal to all who enjoy the title and love the name of Englishman. In clause 4 they asked their "Honours" and "Lords" of the Admiralty to sanction "that we may be looked upon as a number of men standing in defence of our country." I would invite the attention of all the younger officers, and some of the captains too, to this demand of our sailors in 1797, for what the men in all reason asked for then is just what we must give them more freely to-day if we are to attain that ideal discipline which everyone admits is necessary. We must consider our men to be men and not the mere nothings-at-all that many officers consider them. They must be treated as human, rational and thinking beings, as susceptible to pain as any officer, possessing hearts and souls capable of being moved by the kindly words of a friend and pained by the domineering, unmannerly and often uncalled-for abuse of a coxcomb.

But what strikes us most and is of more importance to remember in connection with these unexpected ebullitions in the Navy is, however paradoxical it may appear, the innate loyalty to the Throne, the respect for authority, the love of order, and the golden thread of devotion to officers they loved and respected, that stands out prominently in the dark web of mutiny. their petition to the Admiralty, they—the "scum of the earth," the "sweepings of the gutters," the "jail-birds and hirelings," the "human filth of three kingdoms," who had just won for England the victory of that Glorious First of June, and were soon to add Camperdown and the Nile to our magnificent naval records-wrote: "We likewise agree in opinion that we should suffer double the hardships we have hitherto experienced before we would suffer the Crown of England to be in the least imposed upon by that of any other power in the world." They also went on to declare that they would not weigh anchor until their grievances were redressed, "except in the case of the enemy's fleet putting to sea."

A quaint strain of loyalty, and of respect for discipline and for their officers—or for most of them—ran through all their mutinous proceedings. A rope with a noose at the end was hung from the fore-yard-arm of every vessel, as an expressive hint of what would happen to any offender. Any sailor getting drunk was flogged by his fellow-seamen with extraordinary

The first lieutenant of the "London" shot one of the mutincers dead. He was seized by the sailors, taken at a run to the forecastle, and a noose put round his neck for the purpose of instantly hanging him. Even at that wild moment, however, when the passions of the men were at their highest, discipline exerted something of its ancient magic. Admiral Colpoys thrust his way through the crowd shouting that he alone was to blame, that the lieutenant had merely carried out orders received from the Admiralty. The sailors demanded to see the orders, gravely inspected them, though very few of them could read, and then declared that the lieutenant had "only done his duty," and took the rope off his neck. Some seaman in the crowd shouted that the Admiral himself was a d---rascal. Such language addressed to an admiral seemed little less than blasphemous to those hunger-bitten old sea-dogs, and its author was roughly told he would be pitched overboard if he used such language again during the dispute. On May the 14th the mutineers learned that the men on board one ship had discussed the question of sailing to a French port and giving the ship to the French. Here was mere black treason which those British mutineers would not tolerate or acquiesce in for a single moment. Immediately some of the most powerful ships in the fleet moved into a position so as to cover the guilty vessel with their fire; guard-boats kept watch over her day and night and she was warned that at the first sign of movement she would be sunk. Jack was determined to get his fresh vegetables but no foreigner was to be allowed to step on to the deck of a British ship except over the bodies of the mutineers. Such was the spirit of our men a hundred years ago, and I think "Punch" in his cartoon on the centenary of Trafalgar gauges truly the feelings, the emotions and the sentiments of our men to-day when he puts in the mouth of Nelson the following words:-

"My ships have passed away, but the spirit of my men remains."

It cannot be too strongly urged at the outset, that the new

discipline does not demand any very revolutionary change in the system that has hitherto remained in force, and which under old conditions proved entirely satisfactory. must still have what the Duke of Wellington said the Portuguese lacked in 1800, "the habits and the spirit of soldiers—the habits of command on the one side and of obedience on the other-mutual confidence between officers and men." men from the very moment they join their depots must clearly understand and be forced to see that they are no longer masters of their actions, but the paid servants of the State, compelled to obey, and that it is detrimental to their own interests and inimical to their welfare to harbour the remotest thoughts of They must be taught every day and on every disobedience. occasion that they must instantly and unhesitatingly obey, no matter at what cost to their feelings, the orders or instructions of superior authority, and that deliberate and intentional disobedience will be met with prompt and severe punishment. This is all in accord with what has hitherto been the custom in the Army and if continued throughout the soldier's career there can be no possible ground for supposing, as some people are inclined to maintain, that when the time comes for the soldier to use, within the limited areas that must be permitted him, what little sense nature has vouchsafed him, the Army will degenerate into a rabble.

There can be no possible doubt that when once soldiers have been thoroughly imbued with the habit of obedience, when, in fact, obedience has been solidified into an instinct with them, the more intelligent they are, the better soldiers they will make. If they are never encouraged to exercise their wits, to use their intelligence, to act or move except by word of command, and never asked to assume the slightest responsibility, they very quickly degenerate into mere automata. But the war in South Africa and that in Manchuria have shown beyond all doubt that on the extended battle fields of the present day and in many other situations, there are continually arising occasions when the men must be left to their own unaided judgment and discri-

mination. And it is to enable them to act with credit to themselves and the Army on such occasions that the demand for discipline on a higher plane has arisen. The ordeal of facing the hail of modern fire, the long duration of the conflicts, and the trying operations by night all tell so heavily on ordinary human flesh and blood that only those armies in which the private soldier is animated by something higher than the mere habit of mechanical obedience will be capable of standing the strain.

I have shown in previous chapters how the national enthusiasm of the soldier can be nourished; how the tales of heroic effort can be utilised to renew in popular memory the great traditions of the Imperial race to which we belong; how the hitherto pallid and cold-blooded soldiership may be quickened with renewed vitality and life; and how not only headstrong bravery, but heroic fortitude, loyalty to duty stronger than the love of life, a temper which dreads dishonour more than death, and a patriotism which makes the love of our beloved King and Empire a passion, may and should form a part of the soldier's training for the work that lies before him. If this is carried out consistently, intelligently, and sympathetically, a great stride towards attaining a better and a more ennobling kind of discipline will have been made. What remains to be done, how it should be undertaken, the means the officer can employ, the qualities he must possess, and in fact everything that is required to place obedience on a higher pinnacle in the Army now remains to be told.

Among the multifarious duties that fall to a company or battalion commander there is none that has been productive of more failures or that taxes the tact and common sense of the officer more than the task of maintaining a high standard of discipline among his men. To maintain an easy and at the same time an efficient control and the maintenance of such a spirit of respect, law and order among the men that they readily and willingly submit themselves to the officer's guidance, calls for the display of those qualities which are so often found

in the English gentleman and in no one else. The officer must not only be able to give words of command but he must be able to influence the men, and this is rather a matter of character and of insight into human nature. He should be full of sympathy for them, keenly alive to the difficulties under which they labour, the hardships they have to undergo, the little pleasure they derive from the dull, dreary, and uninteresting life they lead, and be prepared to make all allowance for natural waywardness "With the exception of the 'Victory'" or shortcomings. writes Captain Mahan, "under whose flag he fell after two years of arduous, heartbreaking uncertainties, no ship has such intimate association with the career and name of Nelson as has the 'Agamemnon.' And this is but natural, for to her he was the captain, solely, simply, and entirely; identified with her alone, glorying in her excellences and in her achievements, one in purpose and one in spirit with her officers and seamen; sharing their hopes, their dangers, and their triumphs; quickening them with his own ardour, moulding them with his own image, until vessel and crew, as one living organism, reflected in act the heroic and unvielding energy that inspired his feeble Bonds such as these that bound Nelson and his men together are not easily broken, and I am proud to say there is not wanting evidence that they—the bonds of sympathy and mutual 'respect-are to be found existing between company commanders and men in every regiment of the British Army. And it is this spirit which not only requires every encouragement but the active and sympathetic support of every general and commanding officer, for it is only when such exists that the good example the officer sets the men can be expected to bear His influence should be felt at all points—an influence unseen, perhaps, and unobtrusive, but all pervading; free from the slightest taint of distrust or suspicion, but checking insubordination before the thought of it has taken form in any of the men; exacting a faithful performance of duties, vet encouraging by its inspiration before despondency has attained a conscious existence; kind and sympathetic yet holding the reins of

authority and discipline, and controlling, with unerring justice and an exalted sense of honour, the very motives of action, like the hand of fate.

For years the Commander-in-Chief and Inspecting Generals have wisely insisted that company and squadron officers should know the men under their charge, but unfortunately the benefits they expected to accrue from such a knowledge were never pointed out, and although many officers have proved equal to the occasion even without the stimulus from above, many others have satisfied the Inspecting Officers' curiosity by merely learning off by heart the names of their men a few days before the general's visit. Unless the officer knows those under his command—knows them not only collectively or by name, but individually and intimately—it is impossible to gain that hold over them which comes from a generous respect and the feeling that he is their friend, and which stimulates them to work for him honourably and faithfully even in his absence or in situations when he can neither control nor influence them.

During the Peninsular War Sir Colin Campbell served as a lieutenant in the 9th Regiment--one of the regiments which bore the impress of Sir John Moore's training and character until he fell severely wounded during the storming of St. Sebastian. Forty-six years after an incident occurred which shows the intimate knowledge which officers bred in the school of Sir John Moore possessed of the men serving under their "While," said Sir Colin to an intimate friend, "I was inspecting the depot at Colchester, I noticed that an old man, evidently an old soldier, though in plain clothes, was constantly on the ground, and apparently watching my movements. At the end of the inspection, as I was leaving the barrack-yard, he came towards me, drew himself up, made the military salute, and with much respect said, "Sir Colin, may I speak to you? Look at me, sir; do you recollect me?" I looked at him, and replied, "Yes, I do." "What is my name?" I told him. "Yes, sir; and where did you last see me?" "In the breach of St. Sebastian, badly wounded, by my side."

"Right, sir." "I can tell you something more. You were No.—in the front rank of my company." "Right, sir." I was putting my hand into my pocket to make the old man a present, when he stepped forward, laid his hand on my wrist, and said, "No, sir; that is not what I want; but you will be going to Shorncliffe to inspect the depot there. I have a son in the Inniskillings quartered at that station, and if you will call him out, and say that you knew his father, that is what I could wish." What Sir Colin had been taught in the oth, he put into practice for ever after during his long and meritorious career, and no soldiers have wrought more loyally and faithfully for England than those commanded and led by him. The officers were instructed, and shared their duties with the soldiers and, by the development of the company system, under which the captains were brought into intimate relations with the non-commissioned officers and privates, a knowledge of each other was obtained and a feeling of confidence engendered between the several ranks, which, far from producing familiarity, had the effect of creating an interest on the part of the officer in the soldier, and of calling forth a responsive and willing obedience from the latter, who soon learned to look upon his officer as the protector of his interests and his best friend. Crime was neither concealed nor magnified; every indulgence was extended to the steady and well-conducted soldier-the youngster who might have easily given way to temptation being gently chided, and earnestly warned of the consequences of a persistence in irregular habits, whilst the habitual offender was duly visited with the just penalty of his misdeeds.

To one possessing the sympathetic qualities of Sir Colin Campbell, who so readily shared the emotions and gained the affections of even the humblest soldiers under his command, who exhibited to them both in camp and in the field an heroic standard of duty, and whose guiding star through life was a clear and exalted patriotism, it was not only an easy but a pleasant task to bind to himself the men of the Highland

Brigade with feelings and sentiments a hundred times stronger than anything that a blind adherence to mechanical rules and regulations could produce. Even on his dying bed his thoughts were with his noble Highlanders, and his departing memory found expression in terms of gratitude for the trust they had ever reposed in the Chief, who held them dearer than his own life. It is little to be wondered at that when he rode down the ranks of the oard at Balaclava and said, "Remember oard there is no retreat from here. You must die where you stand," there came from the kilted privates in the ranks the cheerful answer, "Ay, ay, Sir Colin; we'll do that." Or again when the Greys rode back, after participating in Scarlett's immortal charge, Sir Colin Campbell, with head bare, galloped up to them, his war-battered face glowing with pride for the men in the ranks, who rode "like Victors and Lords," "Grevs, gallant Greys!" he said, "I am sixty-one years old, but if I were a lad again I would be proud to join your ranks." "That," said one of the French generals who watched the scene, "is the most glorious thing I ever! saw."

Where such a community of interests exists, and where leaders and men are knitted together by such bonds of affection as those that bound Colin Campbell and his Highlanders together, disciplinary troubles seldom or never arise, and officers and men are, perhaps unconsciously yet nevertheless assuredly, progressing towards that higher discipline which is already within their grasp. When an officer has made himself intimately acquainted with the men's peculiarities of intellect and character, he can without difficulty adjust his expedients to the necessities of each case; and little occurrences both in barracks and in the field which formerly may have caused him serious embarrassment will probably lose their troublesome character entirely. It is due to the men and to himself as an honourable and faithful mediator between man and man, that he should so know the peculiarities of the individual that he can, without reference to his Colour-Sergeant, adjudicate on even the most serious cases that come before him. "What kind of a man is this?" or, "How does this man do his work?" are questions much too often heard in the preparatory stages of an investigation, and no men can have that implicit confidence, which is necessary to ensure the smooth running of the disciplinary machine, in a commander who, in dispensing justice, relies entirely on the opinion and often biassed judgment of a subordinate.

No men can be known, in the way they should be, who never come in contact with their company or squadron commander except during drill or barrack work. Many an opportunity will arise, which ought to be taken advantage of, for friendly and familiar chat about ordinary matters or things in which the men, who have followed different avocations prior to joining the service, may be expected to take pleasure; and an officer should look upon it as a very important part of his duty to show a real interest in their sports and pastimes. Cames calculated to develop their strength, to give muscular control and to aid the growth of the will, such as our popular and manly games undoubtedly do, should be regularly and systematically encouraged, sometimes shared, and sometimes directed by the company commander and his officers. pleasing to note that in every regiment in India there are officers who form and take an active interest in the cricket, football, and hockey clubs of their men and they do not find it altogether unproductive labour. In many cases, however, the initiative in this respect is left to the men, who cannot help feeling in such cases that their squadron or company commander takes but little interest in their welfare. who thinks it is no part of his work, too much trouble, or beneath his dignity to associate with his non-commissioned officers and men on the hockey, football, or cricket ground, and, if he appears there at all, merely acts as policeman to keep the men out of mischief, has strange notions of his office and responsibilities. By failing to realise the appalling sameness and ennui of barrack room life, which daily demands thought and effort from the officer to mitigate or lessen by instituting

games, amusements, and entertainment for the men, he not only proclaims that their interests and welfare do not coincide with his own, but he throws away many valuable chances of getting that insight into the real characters of his men, and that power of exercising an increasing influence over them, which are necessary to effective and intelligent discipline. Many a lesson in upright dealing, in self-control, in manliness, and in a higher and more honourable standard of duty to each other—all of which are no mean factors in reckoning up the strength of an army as well as the health and vigour of a State—may be inculcated and fostered on the cricket and hockey ground by a wise and considerate officer, without the men being conscious of it at the time, which will strengthen the character in the present and tell powerfully for good in the future.

## CHAPTER XI.

There are times of course in the soldier's career when his intentional and wilful disobedience must be met by the manacles and the gaol, but my experience of men gives me encouragement to believe that the majority of Englishmen have such confidence and faith in the honesty of purpose and integrity of character of the British "gentleman" officer that his personality and influence alone will, if judiciously directed, do more towards meeting the new requirements of discipline than the regimental guard room or prison cells. If intelligently directed discipline must aim at making the man amenable to law and order, and to arouse such energy as he possesses in a way to induce him voluntarily to put forth his efforts in the direction we wish; to training him to steady application and not only to prompt but to willing obedience, while at the same time we strengthen him to act more independently until he is able to become a law unto himself, until the company's welfare is his welfare, its success his success, and its good name his good name. In a word we have so to stimulate all right and noble instincts in him, that he may grow in strength both morally and intellectually, and be ready, willing, desirous of, and able to do his duty manfully and faithfully in any isolated position in which he may find himself.

As a matter of fact it is not difficult to control men, either in barracks or in the field, if the officer has any aptitude for government, and I believe the British officer more than the officer of any other army in the world, not only has this natural gift for government, but knows how to use it; but nevertheless knowledge, tact, patience and insight are all necessary if we are to be uniformly successful. It must be constantly borne in mind, for I am afraid it is sometimes lost sight of, that the

men quickly come to like order, and are happiest when surrounded by it. They respect power, and they respect the law when administered with the discrimination and justice for which the British gentleman is so well known.

The democratic tendencies of the age have, I am glad to say, scarcely diminished the respect that the toilers on the farms of Great Britain have for authority, and they readily acquiesce in the rules and regulations which they have the good sense to see are framed for their benefit. But they are not by any means bad judges of character, and with an officer who betrays his weakness and acts injudiciously and inconsistently-as a weak disciplinarian is pretty sure to do-they do not hesitate to set aside the permanent orders of the company, when such things can be done with a probable chance of escaping instant and summary punishment. I have seen the discipline of one of the most renowned regiments in our Army go utterly to pieces, and the misbehaviour, misconduct, and wilful insubordination of the men attain such proportions as to threaten to bring discredit not only on this particular regiment but on the whole Army, and in this case it was apparent to even the latest joined subaltern that the unsatisfactory and discreditable state of affairs was due solely to the vacillation and peace-atany-price policy of the senior officer present.

The mode in which an officer brings his personal influence and power of command to bear upon the non-commissioned officers and men of his company is one of the most important factors in disciplinary control. There are some, and especially junior officers, who are fond of constantly parading the little authority they possess before the men. This is extremely injudicious since the non-commissioned officers and many of the men are so much older than the officer, and if not so well educated, possess such a wide range of knowledge of the worki and its ways, that in their innermost hearts they naturally resent this prating of authority. Authority is not a matter to be talked about either on parade, in the field or in barracks; like instruments of punishment it is much better kept in the

back-ground till needed. When occasion arises for its exercises it is not the substance of what the company commander says which produces an impression on the men, so much as the quiet confidence of his manner—the calm decision, the clearness and firmness of his orders, and the evident determination to have things done according to the established rules and customs of the company or battalion. It is the undemonstrative consciousness of power, which the men quickly recognise as arising from strength of character, fearlessness in the performance of duty, and perfect self-control-a power which is utterly distinct from any mere external display of force or authority-which makes it clear to all that while the officer is not forgetful of the consideration and respect due to even the humblest soldier in the ranks, he is not likely to forget what is also due to himself and the authority he represents. thing appears to be wrong in his company, if it is not pulling well together, or if the demeanour of his men does not appear to be as it should be, he should be capable of putting his finger; on the weak spot at once, detecting what is amiss, and applying the suitable remedy at once in a quiet matter-of-course way, that shows that he is not to be played with, that he knows what he is about and is perfectly master of the situation. He should be charitable and considerate in his estimate of wrong doing, giving credit for the peculiar failings of any particular man, but all the same showing unmistakably that he can, and, if necessary, will enforce the most implicit and unhesitating obedience to his commands. When this course is pursued I have every confidence that the men have sufficient sense to recognise that he is patient with them and inclined to overlook unpremeditated lapses from the strict letter of the regulations merely because they are weak, and not because he has any fear for his own power.

It is not everybody that is gifted with that knowledge of human nature which enables them to come to a prompt decision on matters connected with the failings or weaknesses of others, yet indecision weakens an officer's control more than anything else, and should be carefully guarded against. Quick judgment and decided action which however must not be confounded with rash haste, or with the following of some angry impulse of the moment, are the main factors on which success in disciplinary matters depends. In the event of any of the men showing any determined unruliness, or if they betray the least suspicion of a desire to defy the authority of even the most junior corporal, dilatoriness in making up his mind-whether proceeding from timorousness, inability to grasp the facts of the case, uncertainty as to the procedure to be adopted, or any other cause—is sure to add to an officer's embarrassment, shake his authority, and increase his difficulties in the future. deal with the offender quickly and determinedly is more than half the cure, since it shows the men that any tampering with authority will meet with prompt and certain punishment, and it strengthens immensely the authority of the subordinate leaders. The officer should however act with calmness and with such consideration as the circumstances allow, but above all things with a strong hand. "There are moments," says an American writer, "in the course of life, when the delay which reasoning demands would expose us to the danger which it is intended to avert."

Occasions sometimes arise where any right course of action, though possibly far from the best, is better than none at all, and when the necessities of the case will not allow of any prolonged consideration. Especially when a man is brought before a commanding officer, which should be the last resort of the company commander, the orders "bring this man up again to-morrow," or, "I'll see this man again this afternoon," are very pernicious. They encourage the men to think that the commanding officer has no mind of his own or that he does not place much confidence in his company commander. When the company officers thoroughly understand that they must not bring a man before the officer commanding the regiment until they have tried every remedy in their power, or until the prevalence of any particular crime in their company demands

severe measures, or until the men commit a crime which is quite beyond their power to deal with, then the commanding officer is quite wrong in shilly-shallying with a case that comes before him. The same thing applies to the colour-sergeant in his dealings with the captain of the company, and when the former states that it is only after previously warning a man that he has considered it necessary in the interests of the company to bring him up, then there is no time for nice weighing of all the reasons for and against any particular course of action. For an officer to stand idly by vainly trying to decide what it were best to do, or to postpone the case for further deliberation, is merely to strengthen the opposition to the subordinate.

In dealing with a body of men many of whom may be fairly well educated and are consequently capable of forming an opinion as to the rights and wrongs of any particular case, a certain amount of tact is required. Furthermore it is quite clear that no two individuals under the sun correspond exactly in the qualities of mental or bodily power. Qualities are peculiar to individuals; and, as a company or squadron is an instrument consisting of many individuals, possessing peculiar tempers and different capacities of action, it is obviously the primary business of an officer to make himself thoroughly acquainted with the temper and disposition of each, before he can hope to deal successfully with them when they come before him. When he has done this he will by his successful treatment of each case soon earn the reputation of being tactful. In the control and management of men tact is a very important element, but its exemplifications are so varied, and shade into each other in such a subtle way, that it is by no means an easy thing to define with any exactness. Roughly it may be said, that by tact is here meant an instinctive feeling, allied to commonsense on the one hand and considerateness on the other, as to what is suitable and judicious, a nice discernment on the part of the officer as to what will be right and felicitous in his treatment of the men, so that he may put himself in touch with them, secure their regard, stimulate them to honest and manly

efforts, and generally increase the effect of his influence by the wisdom and sympathy with which it is applied. To put the matter in another way, tact may be viewed as readiness of resource in appropriately adjusting means to ends—skill in adapting his orders, decisions and actions to meet the needs of any difficulty in which the officer may be placed, so that he may invariably do the right thing to stimulate the men to do what they know will always meet with the approval and approbation of their seniors. Or again, tact may be looked upon as quickness of preception in taking into account all the bearings of a case, and the ulterior consequences of any line of action, so as to come rapidly to a decision as to what is the most fitting course to be adopted, and discreetly and consistently to carry this out.

The exercise of tact requires that the officer should have all his wits about him, and be ready to modify his treatment at any moment. It will assist him in discerning what should and what should not be done, and will frequently save him from blundering in his dealing with men; while if he should fall into error, as all officers are liable to do, it will help him to make the best of it and to reduce any evil effects as much as possible.

Some officers, and a great many I often think, are very fussy, and seem unable to refrain from meddling, in the hope of bettering some small and utterly inconsequent matter, even when the men are doing their best and things are going well. This often arises from an overwhelming and all absorbing desire for regularity, straight lines, and right angles. The corporal comes and tells a man that the buttons on his pants are sewn on with white cotton instead of black: the sergeant comes and tells him that half the toe-plate is off his boot; the subaltern falls into a paroxysm of rage with him because his bible is on top of his prayer book instead of the prayer book being on the top of the bible; the captain glares at him with a demoniacal look because the strap of his mess-tin is buckled in the wrong hole, and the orderly officer nags at him for some

other inconsequent triviality. Regularity is essential to good order but the whole congeries of inspectors mentioned above overlook the fact that the man is a human being gifted probably with as much commonsense as а colonel or a general, for commonsense like genius is a gift of nature dispersed as freely in the cottage as in the palace. the man has deliberately and intentionally shewn his kit with all the enormities mentioned above, he should be dealt with at once by the corporal, brought to book, and given such a task as will make him think twice before he does it again. had to put his kit down hurriedly, the corporal should give him more time but see that he does it himself. To be continually interfering with the men,--telling them day after day how to do what a child can do, giving needless cautions and multiplied instructions, or correcting over and over again the same petty faults, which the man is quite conscious of but sees no object in correcting what others will correct for him, -is not only treating the man as if he were a dumb animal but is also detrimental to any sound system of discipline. In fact to be officious in matters of discipline in dealing with men in the prime of life is often as indiscreet as being too lax. Tact must be founded on judgment and sympathy acting together. There is no royal road to its attainment, since it is almost entirely the outcome of experience; and as much is frequently to be learned respecting it from a careful consideration of failures as from successes. A certain and varying pressure has to be put upon a tool, a certain speed of movement has to be given and delicate and well-judged modifications of direction have to be made in order to smooth a cross-grained piece of wood; without these precautions it would simply be torn into holes and the tool would probably be broken. The good workman, the man of experience who knows how to deal with each and every variety of wood that comes before him, recognises instinctively what to do in each case. He humours the wood in all sorts of ways, vet none the less brings it into the state he desires without annoyance to himself or damage to his tools.

So it is with tact in the treatment of the different tempered men in a company or squadron.

To ensure an intelligent and sympathetic obedience and to maintain a high standard of discipline, uniformity of pressure Implicit obedience to orders and the intelligent carrying out of instructions are the foundations on what a higher form of discipline depends for its success; but beyond what is necessary for the welfare of the men and the efficiency of the Army both in barracks and in the field it is not wise to go. The men must no longer be treated as machines, nor as persistent offenders undergoing an unbroken term of punishment and correction. The love of liberty is natural to Britishers, and, as far as this is compatible with an efficient and intelligent discharge of duty, it should be respected and encouraged. Nevertheless the officer must not forget, in his endeavour to improve the fighting capacity of the individuals and to make their life in the Army agreeable for them, that they have to be governed--that individuality in action is not "absence of necessity for obedience," and must never be allowed to degenerate into the following out of their own whims or likings regardless of the general intentions of the commander.

In an army where mechanical preciseness and clock-work regularity of movements constitutes the principal training, the soldier obeys the signal or word of command as part of a machine, and performs his acts in routine according to command, without permitting himself to look at the cause or to judge of the reason of what he does. In another where a higher and more intelligent standard of discipline is aimed at, the object, though still presented by the commanding officer, makes its own immediate impression on the soldier, excites his acts, and animates his effort beyond the measure of the act that belongs The former diminishes the man as to the mere automaton. an individual, inasmuch as it reduces him, from an independent and self-governing being, to a subordinate and exiguous part in an artificial instrument, limited and coerced in his powers of action by external force. The second exalts and improves the man inasmuch as it directs attention to objects which elicit the physical and intellectual powers to their utmost, thereby allowing every one to be in some degree a principal, or at least an intelligent co-adjutor. This is what the Combined Training aims at when it says, "The soldier must also be so instructed that he may be able to comprehend the meaning and object of every movement he is directed to carry out. His individual intelligence will thus be called into play, and he will gradually be induced to take a personal interest in his own fighting efficiency." Such a standard cannot be attained by compulsion or by a rigid and unreflecting form of obedience.

There can be no military system worthy of the name without government, and no government without obedience. dience is a habit and an important one both for the soldier and for the State. It may not be easy during the first few months of the soldiers' service, as it involves the submission of their own will to that of another. The obedience inculcated should be, like discipline, on a higher plane than that we have hitherto endeavoured to attain; it must be that the soldier not only readily responds to the word of command, but is so instructed that he will imitate movements at sight, and act on a wish; in other words he must be intelligent and at the same time cheerful and willing. Slavish obedience, which restricts the will and cramps all spontancity, such as a dog gives to his master, or a horse to the spur, and such as was the ruling feature of our ideas of obedience during the Peninsular and Crimean Wars, no longer, under the changed conditions of modern war, holds good. The motive was weak; it was the obedience of habit; it was demanded and had to be given; it was mechanical and always unsympathetic. Its great failing was that it was no incentive to individual action, or to the growth and development of the character which it left weak and stunted. I believe that in no army in the world is the officer more highly respected and esteemed than is the British officer of our Home and Indian Army, and this regard contributes largely to affection, which gives our officers a mighty

advantage in their endeavours to attain a higher standard of willing and cheerful obedience. It contributes largely to that much desired condition in a regiment when obedience springs from love, respect, and confidence in the integrity and honour of the officer, rather than from mere habit or fear. The officer comes to be recognised as the friend of the soldier, such as Nelson was to the sailor—his guide in the hour of trial and his well-wisher during his service and after he has retired from it—and the soldier recognises that obedience is claimed because it is right and necessary, not only for the honour and reputation of our Army, but for his own safety and well-being.

The personal equation which displays itself in the good or bad qualities of the officer must not be overlooked, for it is a characteristic habit which obtains for some men, such as Lord Roberts, the title of "born to command." A healthy regimental feeling is a great aid to a cheerful and intelligent obedience, and the officers should cultivate it constantly and assiduously, for it is to the esprit de corps of our regiments that we are largely indebted, not only for the most renowned achievements of our Army, but for that uniformity of conduct, and that unswerving adherence to good order which have been the distinguishing characteristics of our soldiers during three hundred years of trial and conflict. The men must be trusted; the reputation and good name of the regiment should be placed in their keeping, for by so doing their pride, responsibility, and sense of duty will be increased, their respect assured, and a great inducement to cheerful co-operation and prompt and cheerful obedience will be offered them.

In the disciplinary control of a company or squadron nothing brings into greater prominence the tact and judgment of an officer more than the way he applies the various degrees of punishment allowed by the regulations or such as commonsense dictates to meet simple cases of apathy or negligence. In the first place I would urge that the limit of force sanctioned should never be utilised except as a last and final resource. The officer should take the men into his confidence, and explain

to them straightforwardly that it is not his wish to spoil their good record by red ink entries, by sending them to cells or by having them tried by court-martial; that his desire is to help them through their service, and to improve them physically and intellectually; that he wants to encourage them to be sober, honest, and industrious, so that when they return to their homes after eight or nine years' service they will not only have £100 each in their pockets which will give them breathing time to look about for employment, but will be better men and better citizens of a Great Empire; and that it will give him the greatest pain to have to send any one of them to a felon's cell. Above all things the non-commissioned officers and men must clearly understand that all punishment and all degradation originate from their own acts, that the gaol, guard room, cells, hard labour, and fines are all locked up in a box in the company commander's office and that the key to the box is in their hands.

" My object, men, is to assist you," the company commander says, "to share your pleasures and discomforts, to participate in your sorrows and your joys, to help you with my advice, to encourage you when despondent, to frame simple rules and regulations that I consider necessary for your welfare, to evolve measures for your efficiency as fighting men, and it will be only when any of you take the bit between your teeth and do things that tend to destroy the harmony of my company, and upset my good intentions that I shall have to exercise my authority and punish you. With a large body of men such as you are, order and system are necessary, for if order and system do not exist all kinds of irregularities detrimental to your efficiency and well-being creep in; your rations are not properly weighed, your water supply is not superintended, your meals are irregularly served, your sanitary arrangements are neglected, your attendance when sick is irregular and your efficiency as fighting men is impaired. You are all men gifted with a certain amount of common-sense and I am sure you all agree with me that in a company of men if such a happy-go-lucky style were

allowed to exist life would not be worth living. I therefore ask you to co-operate with me, to assist me, and to make my task in maintaining order and discipline, not only an easy one but a pleasant one also. There are times when an order may appear to be unjust, unreasonable and aggravating, but when such an order is given you can best assist me by promptly and willingly carrying it out, and having done so if you ask your corporal to bring you before me I will go carefully into the case and if injustice has been done or if you have been harshly dealt with I will see that, as far as possible, it does not occur I look on you as my comrades, my companions in arms, and I have every confidence in your manliness as Englishmen, to do honourably and faithfully whatever is entrusted you, and I also ask you to have implicit confidence and faith that I will do my duty towards you loyally, faithfully and honourably."

When officers and men thoroughly understand each other the former will find that a gentle rebuke or a mild reproof will often suffice to meet cases when punishment would otherwise The manner in which such reproof is given have been used. has a great deal to do with its power as a correctionary influence. It should be given earnestly but without any sign of petulance or irritability, and should be directed against the evil, which is not always the case. I have often seen officers exhibit such hasty judgment, take such intemperate action, or use such violent language when reproving a man that there could be no possible doubt that the reproof, instead of being directed clearly and distinctly against the man's fault or failing, was merely the outcome of the officer's temper or personal This is quite wrong and officers would do well to annovance. guard themselves from falling into such an error, for the men when so treated have sense enough to see that they have been admonished by the leader's bad temper and not for the slight fault they have committed.

Another serious but not uncommon mistake in rebuking men is for the officer to allow himself to fall into the habit of

constant fault finding-the running fire of petty and annoying rebukes, which goes by the name of "nagging." I have seen men become sulky and listless through being constantly nagged at, and I have seen non-commissioned officers neglecting to interest themselves either in their company or their leader through being unendingly found fault with. Some company commanders, like inspecting generals, think the more faults they can find, the more petty rebukes they can administer in a short time, and the more holes they can pick in a man, the better their work has been performed and the more their superior knowledge has been evidenced. But the company officer, although he may be subjected to these trials himself for many years to come, has sense enough, I feel certain, to see that in captiously, adversely, and unsympathetically criticising everything the men do for him, he soon imbues them with the feeling that his pretentions to being their friend are shallow, flimsy, and, in fact, false. Persistent and unnecessary faultfinding keeps both the officers and men continually in a state bordering on vexation and discontent, and such a frame of mind is distinctly detrimental to any chance of obtaining good results. When the men recognise that, however well they turn themselves out or however they endeavour to do their shooting or drill, they will be subject to petty rebukes, they soon cease to take serious notice of what is said and grow callous to reproof even when justly deserved or rightly given. seen Adjutants at guard mounting standing for half an hour trying to find fault where none but the most captious could see any, and where an ounce of praise to the well-turned out men would do more good than a ton of such petty and almost infantile fault-finding.

As with incentives and stimulants of all kinds, only the least amount of reproof or punishment that will accomplish the object the officer has in view should be employed; and the means used should be as varied as the number at disposal or the circumstances will allow. If punishment is frequently appealed to in the same form a larger and larger amount becomes necessary

to produce the desired effect. It has been rightly said that "the best remedy in the world may soon cease to be a remedy if it is too often applied." An officer who knows his business will always seek to enlist the sympathy of his men on the side of order, discipline, and right, to secure their confidence, and especially to get hold of the most intelligent, deserving, and praiseworthy men of his company. The opinion of the general body of men acts powerfully here as elsewhere, and a man will feel his correction with tenfold force if he feels and knows that he stands equally condemned both by his officer's judgment and by the right feelings of his comrades. The men's feelings should never be wounded unnecessarily, and an officer who indulges in sneering and sarcastic remarks, does so at the sacrifice of a certain amount of discipline. The men are unable to reply and whatever feelings they possess towards their commander soon evaporate under words that make them appear ridiculous in the eyes of their comrades. They clearly understand the underlying unkindness of such remarks, and they are quite sensible enough to quickly recognise that the officer from his authority and position is taking advantage of their helplessness, and, as all men with any manly sentiments will do, they lose their affection and desire to please. I do not wish it to be understood that a good-natured joke perpetrated at the right time should be discountenanced, for as every officer in the Army knows, the men enjoy such a joke at any time even if it is intended to bring into prominence the foolishness of any of them. Good tempered ridicule is quite free from the malevolent feelings that characterises sneering and sarcastic remarks, and may, if judiciously used, prove an efficient means of causing the men to exert themselves, of arousing their attention, and of making them think before they act so as to avoid making It needs considerable tact, however, and a foolish mistakes. happy manner to employ it properly. I know several officers who employ it frequently with good effect, and without endangering their influence by causing any bitterness or in any way bringing about a revulsion of feeling towards them; but there are many who are neither tactful nor good-natured enough to employ it in this way, and where such is the case it is much better left alone.

If an officer has unintentionally or carelessly done a man an injustice, he should not hesitate to acknowledge it. It is quite a mistake to suppose that to do this loosens the bonds of discipline, lowers his influence, or is derogatory to his position or dignity, if it is done properly and in a manly way. The acknowledgment should merely show the officer's desire to be strictly just and fair and should carry with it an expression of sympathy with the man for any inconvenience or injury he may have sustained. None of us professes to be perfect; it would be the purest affectation to conduct a company or squadfon on the assumption that we are.

The next point I wish to call attention to is the amount of punishment and the number of entries in the defaulter books required to maintain good order and discipline in the company If the records were available, and if a comparison could be made, I think it would open the eyes of many to see the excessive number of punishments inflicted in some companies as compared with others. Some officers never allow a day to pass without giving the men under them one or two entries, whilst others appear to think that the raison d'etre of their existence is to secure convictions. On the other hand there are not wanting some who think that the ends of justice are met and the good name of the company or regiment maintained by repeated cautions and refusal to make an entry where entries are necessary. Both are bad disciplinarians, The first point to bear in mind when dealing with men is that, so long as correct discipline is secured, the less punishment of any sort is employed the more salutary will be the nature of the control exercised. The second point, I need scarcely remark, is that punishment of some kind will always be necessary where numbers of men have to be controlled; for there are certain to be instances where the officer's warnings and reproofs will remain unheeded, or regulations be set at defiance.

On such occasions it is not only necessary for the officer, but entirely for the good of the men, that confinement to barracks or imprisonment should step in to the support of law and order; and the officer must not, under any circumstances whatever, shirk the weighty responsibility that devolves upon him in this matter. The point I wish to insist upon is not that an officer should try to govern his company without punishment, but that he should do his utmost to manage with less and less of it as time goes on; and that the standard which he should set before himself is the abandonment of the most degrading forms of punishment, except in cases where the man proves himself to be utterly heedless, or defiant of, other remedies. not be possible, even with the most earnest endeavour, to reach such a state of things for some instance of gross and disgraceful misconduct may at any time turn up, which it would be no true kindness to the offender, and would be folly with respect to discipline, to pass over or treat leniently; but it will be a good thing for the officer himself as well as for the men of his company to have honestly and conscientiously made the attempt. Time after time inspecting officers point out the increase in e number of courts-martial and other severe punishments in

o number of courts-martial and other severe punishments in particular regiments, but no one takes the trouble to point out how these can be reduced or to get to the root of the trouble, and in many cases both company and commanding officers reduce the number of punishments by not punishing where punishment is absolutely necessary.

The most certain sign of a bad disciplinarian is an excessive number of punishments awarded, and a company or squadron commander who finds himself doling out punishment day after day without producing the desired effect, would do well to pause, examine his methods, and see if he cannot produce better results by other and more sympathetic means. In any case he should always endeavour to suit the punishment to the offence. To give a man confinement to barracks for having his buttons dirty on parade or for not having his kit regularly laid out at kit inspection is not only giving excessive but quite

unsuitable punishment, and when an officer finds he has been doing this he should alter his methods. Care should be taken not to goad a man into obstinate disobedience or determnied defiance, such as, I fear, non-commissioned officers are frequently prone to do. Where tact and judgment are exercised, instances of stubborn refusal to do what is required are rare. Such a case however may occur, and in my opinion where, on inquiry, it is clearly shown that the officer has done all that reason demands to bring such a man to a sense of his duty, but that he deliberately, intentionally, and wilfully defies his officer and authority, he should be severely punished and dismissed from the service without the slightest hesitation or compunction.

The retention of such a man is not only detrimental to the interests of the Army but makes it ten times more difficult if not altogether impossible for an officer to maintain a high standard of discipline in a company where such a man is allowed to continue serving. And yet it is frequently done, for I see men who have defied their company officer let off with a dution or with a few words of grand-motherly advice from a kindhearted commanding officer, and others who have told their company officer to go to h-allowed to return to their regiments after doing a few weeks' imprisonment. The explanation often urged for such mistaken and misdirected leniency is that insubordination is not common in a particular company This may be quite true in a general sense but it is no excuse whatever for allowing a man who deliberately and defiantly tries to kick to pieces the whole fabric of military I say again, at the risk of reiteration, that if we are to have a more reasonable and intelligent discipline in the Army, it can only be obtained when every man in the ranks clearly and distinctly understands that to throw anything at his commanding officer in orderly room; to tell his officer to go to h--; or to show that he deliberately and intentionally sets at defiance every officer from his battalion commander downwards, will, as certainly as the sun will rise to-morrow, bring down

on his head with all the weight of a thousand of bricks the severest penalties the Army Act permits.

An officer would do well to remember that the way he investigates a case and the mode in which punishment is inflicted has much to do with its effect on the offender and on his comrades. He should encourage the man to say straightforwardly anything he has to say, and should listen patiently to all that may be properly urged in extenuation of fault, but, under no circumstances whatever, should be allow the man to argue with him in the hope of escaping, nor to cavil at his decision. judgment in all minor cases should be final, and having been deliberately and justly arrived at nothing more should be said. There must be no trace of personal animosity against the man, or of careless indifference; on the contrary an officer who knows his men well will on every occasion make it quite clear to them that he feels the infliction of punishment to be an unpleasant part of his duty, but one which he must not shrink from performing. That every man in the company recognises the justice of the punishment is essential to success, and this is never likely to be the case when it is administered carelessly or Above all the officer should bear in mind that his chief efforts should be directed towards arousing such a sense of honour and spirit of zealous effort that punishment is required less and less, and the men perform all they have to do with a cheerful alacrity and goodwill. The cultivation of good habits is a great aid to the formation of character, and this should be looked upon as the ultimate goal of all discipline. When the men are habituated to orderliness, temperance and industry, and they realise that in obedience, respect for their superiors, and the complete fulfilment of human duty, lies their hope of recognition and their prospect of success in military life, we can feel that we have effected something tangible towards the elevation of the military character and the promotion of military efficiency.

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## CHAPTER XII.

I now propose to take the company commander with his thirty men through what is not only a very important but an exceedingly interesting part of their training, namely, their individual-off-the-range practices. I say it is a very important part of their training because I fear it has hitherto not been regarded as such. Throughout the whole year from April 1st to March 31st, officers and men are to be seen on the rifle range shooting at known distances, with distinct targets, over level ground, assisting each other, and taking unlimited time over each shot, while the individual-off-the-range practices in which each man is required to put into practice the knowledge acquired on the range, are allotted but two or three days per troop or Although considerable progress has been made during recent years in the field-training of our men for war I cannot help thinking that the rifle range still holds a much too prominent place in that training. I have already given my views as to the part it should play in the shooting training of During the first or even the second year of the soldier's service he should be kept on the range, encouraged, assisted, and directed by his squad commander until he becomes a first class shot or a marksman. During the third year of his service he should be required to fire the course without any assistance whatever, and if he shows that he can attain the same high standard by his own unaided efforts, the range should see him no more, unless it be to fire a few rounds annually to enable his officer to feel satisfied that he is still capable of the same high standard. The importance of this is not realised, for searcely a single battalion in India has availed itself of the sanction accorded in the Musketry Regulations to excuse the marksmen of last year from shooting the complete course on

the range during the present year, and 150 rounds of ammunition per man is practically wasted in forcing good shots to fire over a course which they have already proved themselves capable of performing efficiently. The same things happen with drill and tactical training, and in our long service Army officers are still to be seen telling veterans of many campaigns how to hold their reins and how to load the rifle. Our regiments are constantly and unceasingly trained but I doubt very much whether the men are more efficient at five or ten years service than they were at three.

During the recent course of instruction at the School of Musketry, I found many non-commissioned officers of both the British and Indian Army who, although they have been "rifle range" marksmen and first class shots several years in succession, could not in the field hit a target representing a man standing at ranges varying from 500 yards to 200 yards, although they were given ten rounds of ammunition each to do It was a calm and clear day, the ground level, and it with. the target most distinct with a suitable background whereon the strike of the bullets could be seen. On another occasion away from the range, white iron plates, 12 inches square, were placed on the ground at 400 yards and each student was asked to knock down one plate and then return to barracks. shooting began at 6-30 a.m. and although after an hour's shooting the targets were brought to within 250 yards of the firers, it was nearly 11 o'clock before the last plate was knocked Are such results compatible with the time, labour, and enormous expense, entailed in training our long service men for war? These men, nearly all "range" marksmen, are no better practical shots to-day than they were four or five years ago. Had the man-target mentioned in the first example been a figure painted on a six feet square white target, and had it been placed on the range with a spotting disc to show where each shot went, and with the distances at which the men were firing clearly indicated on the ground, I have not the least doubt that nearly every student present would have got fifty

per cent. of hits out of the ten rounds fired at such short ranges as from 500 to 200 yards. The range should be used for all it is worth, but it must be kept in its proper place, and, regardless of figures of merit when once the soldier satisfies his company commander as to his efficiency on the range as already defined, he should, the next year, be moved on to the next and the most important stage, namely, his individual-off-the-range The greater part of the ammunition annually allowed for each man will be at the disposal of the company commander and at least fifty rounds per man should be expended on these individual exercises. The company commander should, at any rate for the first year, take charge of these practices, leaving his subaltern to superintend the shooting of the remainder of the company on the rifle-range, or to carry on such duties as regimental arrangements and orders may require. not mean that the company commander should neglect the range shooting of the remainder of the men. On the contrary he should frequently visit them, point out to them that he looks to them to do their best, to throw their hearts into the range shooting, to do all they can to become marksmen or first class shots, and so give him the pleasure of taking them away from the range next year to much more sporting-like and interesting The men will soon begin to see that there is something beyond the present constantly recurring round of range shooting, and they have sufficient pride in their company and quite sufficient regard for their own feelings to realise that if they cannot shoot well enough to get away from the range they will soon be regarded as the laggards of the company. opportunity should be given and inducement offered for them to indulge in private practice, in fact the 18,500 rounds allowed annually by Government at half price cannot be more profitably expended than in giving it to these men, say at one quarter price, the regimental funds providing the balance. manding officer who proceeds on these lines with the musketry training of his battalion should now see before him clearly and distinctly the lines along which progress is to be made.

Firstly.—The men who on the range became marksmen and (if sanctioned) first class shots last year must during the present year be trained to a high standard of individual shooting in the field.

Secondly.—The remainder of the men who could not get beyond 2nd and 3rd class must be kept on the range, and good officers and non-commissioned officers detailed to guide and assist them where necessary, so that they may be able to join their more capable and efficient comrades in the field next year.

Thirdly.—To train all the officers and non-commissioned officers to a high standard of efficiency in controlling, directing and manipulating the fire of squads, sections, half-companies and companies, in every conceivable tactical situation that may arise, and in which the men actively, zealously, and intelligently participate.

I have already pointed out how the instruction of the poor shots on the range should be conducted, and, as stated in the opening lines of this chapter, I now propose to accompany the company commander into the field with his thirty men. The first thing to be borne in mind is that a great deal more thought, foresight, previous preparation, labour and instruction, are required to make a man, however well he has fired on the range, a practical, quick, and self-reliant shot in the field, than are demanded by the purely technical shooting on the rifle range. For the daily shooting on the rifle range, the regulations say what is to be done each day, the number of rounds to be fired, the positions the men must assume and the time allowed for each shot; furthermore the ground is already selected, stop butts provided, targets constructed, trenches prepared, and the distances marked. This makes the range shooting very simple, and all the company officer has to do is to tell his senior non-commissioned officer the time he wishes the practice to begin and everything else is done for him. He must not expect the individual-off-the-range work to be anything like as simple, for if he does he will be grievously mistaken.

If he desires to make his thirty men the best and most practical field shots in the Army he must be prepared for hard and continuous work, late breakfasts, and but little afternoon amusements during the time he is working with them. occasionally be able to delegate some of the work to his noncommissioned officers or even to the men themselves, whose interest in the work will be greatly enhanced by a judicious trust placed in them. In these practices the company commander must think out his little schemes every day, select his ground, the position of his targets, and the points the men are to fire from. He must take the ranges, or pace them, so that he can check or point out the errors in the back-sight elevation during the practice. He must decide on the kind of target or targets he wishes to use, fix their dimensions, and decide how they are to be manipulated so as to make the exercise as realistic as possible. The men who are to do the fatigue work must be shown the positions they are to occupy, the pits or trenches they are to dig, and the way they are to work their targets. A few of these things may of course be left to a non-commissioned officer, but a company commander should carefully consider before he does so whether the practice is likely to lose any of its interest, reality, or approximation to service conditions by being left to a non-commissioned officer.

It must be remembered that non-commissioned officers, however capable they may be, cannot be expected to possess that insight into the conditions of war which is necessary before field firing schemes can be made to simulate such conditions, such as an officer with a liking for the subject and a well-stocked library is likely to have, and a company commander who leaves everything to his non-commissioned officer is not only making an unfair and unreasonable demand on the latter but is neglecting his work as much as a locomotive driver does who leaves his train to the care of the fireman before it has reached its destination. I hope I may not be misunderstood. There is not an officer in the Army to-day who is more in favour of giving our non-commissioned officers every opportunity of showing their ability and resourcefulness than I am, but if our shooting is to be ahead of that of other armies we must carefully and minutely study every battle or operation in which the rifle is used so that we can form opinions as to how its capacity for quick loading, its accuracy, its flat trajectory, and its long-ranging powers may be utilised to the best advantage. Our non-commissioned officers have neither the educational qualifications nor the means to do this, and so it must devolve on the officer. The officer should, however, take whatever noncommissioned officers happen to be among his thirty crack shots into his confidence, talk over the proposals he formulates with them, seek their advice, encourage them to think out any kind of scheme for the following day, take one or two out with him daily to assist in making the preliminary arrangements, look over the ground with them, discuss its peculiarities and possibilities, invite them to say where they think the targets should be placed and where the men should fire from, etc., etc. The non-commissioned officers so treated will return to the sergeants' mess every evening and say "we have drawn up a very practical little scheme for to-morrow," and the company commander will have gained by this community of feeling more than all the disciplinary rules and regulations ever printed can acquire for him.

With regard to the company commander, if he aspires to making his company the most efficient shooting company for war in his battalion, he should, in my opinion, be:

- (1) A keen musketry soldier.
- (2) A good shot.
- (3) A good judge of distance.
- (4) In possession of an up-to-date musketry certificate.

  There are still, I regret to say, many company and squadron commanders who have not been through a course of musketry at the schools provided for the purpose, while others obtained their certificates so long ago that they are practically useless. Whatever opinions commanding and other officers may hold

as to the practical utility of these courses, I think it is undeniable that where the schools are conducted by officers who are sound tacticians and thoroughly conversant with recent campaigns and modern requirements of war, the advantages of going through a well-planned and practically conducted musketry course cannot be overrated.

- (5) A capable tactician and at least fully capable of planning, illustrating, and carrying out all the minor operations of war such as a company or squadron may be expected to be confronted with.
- (6) Should have a thorough knowledge of the South African War, for the clever and intelligent use of the rifle by the Boers on numerous occasions provides us with more examples with which to illustrate the use of the rifle both by individuals and small parties, than any other war of recent times. The soldier cannot be expected to take any interest in the dull cut-and-dried principles of the manuals and regulations, and an officer who by extensive reading provides himself with a fund of incidents from actual war with which to illustrate his work has secured one of the main levers to success in the education and training of his men.
- (7) Be alive to the excellences of his men and the advantages we possess over others in the education and training of a voluntary and comparatively speaking, long-service Λrmy.

I do not propose to go very deeply into the question of targets. At the close of this chapter will be found a rough outline of what I consider a suitable annual course of training and practices in individual field shooting, and, wherever considered necessary, a few of my ideas regarding the kind of target that might be used will be offered. I am of opinion that we have hitherto kept a great deal too religiously to the targets indicated in the Musketry Regulations. There is not the least

necessity to do this, nor is it advisable, since a too rigid adherence to a particular form and size of target, prevents to a considerable extent that variety in exercises which is so essential to success. No two company commanders will, if left to themselves, evolve the same scheme and consequently the same target will not suffice for all. In deciding on the kind of target he wishes the officer should bear in mind that no matter how practical or how nearly approaching service conditions his exercise may be, the first and essential object is to get the man to hit the target, for no man will ever improve in shooting by constantly missing a too difficult object. Targets approaching service conditions, that is, representing approximately the same surface as an enemy may reasonably be expected to offer on service, are of course essential, but their main object must be to enable the officer to get the men to hit and at times to hit quickly. The next point to bear in mind is that the strike of the shots should be seen. This means that the officer must carefully select the piece of ground on which the target is to be placed, or from where it is to appear. To superpose a figure target on a large area of canvas is of course the simplest method of ensuring the exact strike of each bullet being detected and shown, but in my opinion it is much too frequently resorted to. The great objection I have to it is that, like the rifle range, it relieves the man firing of the personal necessity of watching and endeavouring to detect where his bullet has gone. When such targets are used the firer knows that the marker will soon show him where his shot has struck, and, as a rule, beyond aiming and pressing the trigger he takes no further interest in his shot. Such a habit is a pernicious one and where it pervades the whole company the field firing will never be good. Every man in the Army must be habituated not only to aim correctly and press the trigger but to exert himself to the utmost to see where his bullets are going, and they can only acquire this habit when the object to be hit stands by itself and on such ground as will, when hit, throw up some dirt or dust, and it is only when an officer, having carefully examined

every bit of ground within ten miles of his camp, fails to detect such ground, that the superposing of the object on a larger surface should be resorted to. But if the ground is carefully examined and tested by firing a shot or two into it, I am certain that many suitable plots will be found, and in any case a couple of cart-loads of loose earth spread six inches deep round the target will afford ample capabilities for observation to the soldier who is alive to its importance.

If, as this year's Musketry Memorandum says, thousands of shots are wasted through no one knowing or caring where they strike, it is because the targets have been placed on ground unfavourable for observation or that the men are not forced to observe. In any case it is quite incongruous to put the men through a carefully planned course of training in jungle-craft and observation if, when they press the trigger, they shut their eyes until the marker puts the disc on a canvas target. It will be said by many that by superposing the object on a larger surface, the man will, from having his shot exactly marked for him. be able at least to learn the necessary correction from each hit on the target, whereas when the shot strikes the ground he will have to guess its distance from the object and the correction necessary. But such arguments are misleading and show conclusively that those who proclaim them are incapable of discriminating between what the soldier is taught on the rifle-range and what he must learn for himself in the field. They fail, as we all have done hitherto, to keep the rifle-range to its legitimate work. On the range the soldier has each shot marked for him, and if, as recommended over and over again in these notes, he has been allowed to fire his course without the meddlesome interference of others he will also have learned what correction is necessary for a shot that is marked two feet above the bullseye or one foot to the right of it, but off the range and during the practices I am discussing he sees the dust fly up to the right or over the object and it is now his business to form an opinion himself as to how much to the right his shot went and what correction is necessary.

Whilst on this subject I think it only right to say for reasons which the above should make apparent that I entirely disagree with the practice which is gaining ground daily of allowing one man to spot for the other. During an engagement when the men are lying under fire and extended to from five to ten paces apart it is ridiculous to suppose that Private Smith is going to crawl over to Private Jones with the object of telling him where his shots are going. Under the hail of modern fire each man has quite enough to do to look after himself, and besides when hundreds or thousands of shots are striking the enemy's position it is only the man actually firing who can, if the ground is favourable, detect where his shot is going, or if he is firing at any particular man, it is impossible for him to keep on explaining to his comrade which one out of hundreds is the man he is shooting at, and lastly, it is foolish to imagine one half of a battalion observing while the other half shoots. The use of the spotting disc in the field or of one man observing for the other, which relieves the soldier of all responsibility with regard to his shot, knocks out one of the most important stones in the foundation of his efficiency. Place the target on ground which, when struck, gives a reasonable chance of the strike being seen and having done this insist on the soldier seeing it himself, and correcting his aim accordingly. In short in training the individual soldier for war do not do a single thing for him that he can reasonably be expected to do for himself.

One of the greatest faults in all our training hitherto has been that there has been a great deal too much telling the men what to do and how to do it, instead of leaving them to do what a ten-year-old school boy would, it left to himself, probably evolve some way of doing. Within the last six months I saw a case which exemplifies this exactly. An officer called up a soldier of five years' service and twenty-five years of age. He wished the man to go across to, and take up a position on, a hill about half a mile away. I stood utterly amazed while the following conversation took place.

- The Officer.—Now, Private Jones, face that way. Do you see that square white stone in front of you about fifty yards off?
- Private Jones.—Yes, sir; I think I see the one you mean.

  The one with the corner chipped off.
- The Officer.—Yes, that's the very one. Now look straight over that stone and you will see a stone bridge about forty or fifty yards' beyond it.
- Private Jones.—Yes, sir. I see the bridge allright. There is a tree just to the left of it.
- The Officer.—Quite so. Now look at the right edge of the bridge.
- Private Jones.—Yes, sir. I am looking at the right edge of it.
- The Officer.—Very well. Now carry your eye a bit further and you will see a white cow grazing.
- Private Jones.—There are two white cows, sir! Which do you mean?
- The Officer. -Now look here; you see the square stone just in front of you?
- Private Jones.—Yes, sir. The one I looked at first.
- The Officer.—Yes, of course. Do you see the right edge of the bridge?
- Private Jones.—Yes, sir. I can see both the square stone and the right edge of the bridge.
- The Officer.—Very well. Now get them both in line and look beyond the bridge and you will see a white cow.
- Private Jones.—Yes, sir. I see the one you mean. It is the one looking this way.
- The Officer.—Yes, but it takes you a long time to see anything. Keep your eyes open. Now look straight over the cow and you will see a cart standing near the corner of the cavalry riding school.
- Private Jones.—Yes, sir. I see the cart. There is a native standing near it.
- The Officer.—Yes, you are apparently waking up a bit. Now look straight over the cart. Do you see the small hill with a white rock on the top of it?

Private Jones.-Yes, sir. I see the hill.

The Officer.—Never mind the hill. Do you see the white rock?

Private Jones.-Yes, sir.

The Officer.—Well now I want you to go up to that white rock and sit down somewhere near it.

When the man moved off I ventured the opinion that such a method of dealing with him was quite opposed to any sound system of individual instruction. The officer disagreed and said that if he had not taken the trouble he did to make absolutely certain that the man knew where he was to go, he would most certainly have gone to the wrong place. I do not uphold this view since it rests on the assumption that the man has no more rationality than a camel. If we assume at the outset that the man can do nothing himself we can never hope to make any progress, and the soldier will still continue to rely on rules, regulations, and instructions, before he attempts to do even the most childish things. Instead of picking the man up, carrying him to the first stone, then to the bridge, then to the cow, then to the cart, and finally to the hill, he should have been called out, the hill pointed out to him, asked if he recognized it, and told to go and place himself beside the white Nor should be feel certain that if he goes wrong on his way there that a corporal will be sent after him to put him right. When once he understands where he has to go, he must be made to go there himself. If he fails to do so he must be taken in hand in the afternoon, different points a mile or two miles away pointed out to him, and be made to go to them. There must be no such thing as assuming that a man twentyfive years of age cannot go to any point clearly indicated to him without all the childish minutiæ such as the abovementioned officer indulged in. I say again there is an inclination, especially among the non-commissioned officers, to minutely explain even the most simple things before asking the men to do them, and officers will do well to put down at once this most pernicious habit. It is not that individuality has been stifled but that it has never been allowed to exist, and this has been brought about because officers and non-commissioned officers are imbued with the fallacious idea that the men are absolutely incapable of doing anything themselves.

The first and most important consideration therefore is to place the target where the ground in its vicinity permits of the misses being detected by the man firing, and having done this to throw on him the entire responsibility of detecting such shots and of correcting his aim accordingly, and it is only when the nature of the ground renders this quite impossible --which will seldom be the case-that the object should be superposed on a larger canvas to permit of the misses being I hope I have made myself quite clear on this point for it is upon its true appreciation that the future successful individual-off-the-range shooting of our Army depends, and it is to the universal neglect of this principle that I attribute largely the little real progress in field shooting. Whenever I see shooting being done, whether pool, match, or classification, there is always to be seen officers and non-commissioned officers who do nothing else but tell the men where their shots are Just as I have so often pointed out we have no earthly right to assume that the man in the ranks has no sense, so for the same reason we have no right to do our shooting on the assumption that he has no eyes, or that he cannot use them like any human being.

Having selected the ground on which he proposes to place his target the company or squadron commander has next to decide its shape and size. A glance at the British Muskatry Regulations at present in force will show him that a very important change in the marking and shape of targets has recently been introduced insomuch that vertical errors in shooting are now treated much more seriously than has hitherto been the case. Formerly the targets used did not permit of any distinction being made between vertical and lateral errors in shooting, and a bullet which struck two feet above the bullseye was considered to be quite as good a shot as the one which

struck the same distance to the right or left. Under the new regulations and the targets introduced by them, this has been altogether changed and a man who at 500 or 600 yards goes one inch over the head of the figure gets only one point, while another who goes anywhere to the right or left and within two feet of the centre rectangle gets three points, and a low hit counts two. The sudden discovery in 1905 that we have been firing at the wrong kind of targets for thirty years has not only raised a little smile throughout the whole Army but the allotment of points has called forth a certain amount of adverse criticism. Company commanders feel that a shot which goes just one inch above an opponent's head is a much better shot than one which goes two feet past the right of him, and that a shot six inches above him is worth as much as one six inches below. With regard to the former of these contentions it is perhaps not universally known that the tendency in battle is to shoot high, and it is to endeavour to overcome this tendency or, at least, to make some sensible reduction in it, that the overhead shots have been so severely penalised. With reference to the latter no one can deny that especially when shooting at an enemy advancing over level ground shots which strike short are better than those which fly clean over his head, since the former not only keep the beaten zone constantly in front of him and therefore deter his advance, but also make a certain number of rebounding hits. Practical experience, however, is always worthy of consideration, and my own experience of being shot at leaves no possible doubt in my mind that, when on the defensive and holding a commanding position such as a ridge, the shots which fly immediately over one's head have a far greater demoralising effect than those which strike the ridge ten or fifteen feet below. The latter can be seen and the confidence that comes from merely seeing the strike of bullets which through error in range cannot do any harm, cannot be overlooked. On the other hand when a shot whistles just over one's head the uncertainty regarding it is exceedingly disconcerting. Again it is quite certain that in

nearly all the Japanese attacks during the recent war in the Far East it was a shower of lead which, just passing over the heads and missing the first line, rendered any orderly formations or regular and systematic advances of the supporting lines quite impossible. There is therefore, in my opinion, a certain amount of reason in the complaints of the company and squadron commanders when they urge that a shot which flies just a few inches over the head of the figure is worth something at the short ranges and more than one point at 500 and 600 yards.

But apart from this the main point for consideration which both regulations and company officers overlook is whether the severity in marking is such as in any way to dishearten and discourage the men, for if it does it most assuredly defeats its own object. A high standard as to what constitutes either a marksman or a first class shot is always desirable, but any practices which are either so stringently marked, or for which the targets are so difficult and tricky as to preclude any reasonable chance of scoring are undesirable. They give the indolent and apathetic soldier approximately the same chance of scoring as the painstaking and progressive; they inculcate the feeling that luck and chance play a predominant part in the shooting and when once the good shots of a company begin to say "It's an absolute fluke whether we score or not," the bottom has been knocked out of any systematic or progressive training in practical shooting. I cannot impress too strongly on all company and squadron officers that in the conduct of all shooting, whether on the range or in the field, their main object must always be to give their men confidence in their ability to hit every time an enemy who presents himself under such conditions as we know are likely to be found on service. This can only be attained by giving them a reasonable chance of hitting, and having hit, a reasonable number of points as a reward for their attention and honest endeavour. tices in Part II of the Native Army course and a few of the classification practices in the British Army trained soldier's

course do not afford a reasonable prospect of hitting and they consequently produce despondency and hopelessness where there should be encouragement and confidence. The element of luck which they have introduced into the shooting of even the best shots, negatives or makes ridiculous the officer's previous advice or instruction however careful, sound, or systematic it may have been, for no man who misses shot after shot at such short ranges as 200 or 300 yards can be expected to place any confidence in his instructors or the advice they A company or squadron officer, therefore, when considering the target he is going to use during an off-the-range practice should see that it is of such dimensions and colour and so placed that, providing the soldiers judge the distance correctly, they may, being first class shots or marksmen, be reasonably expected to hit it. The officer must then see that they do hit it and they should not allow them to return to barracks until they do. This is a much better method of proceeding than the one which I fear exists in many regiments at the present time, namely, of giving the men a too difficult target which even the best shots in the company may, or may not, succeed in hitting. When three-fourths of the men exercised return to barracks without having hit the target, the company or squadron commander may rest assured that not only has their ammunition been wasted, but their confidence in their rifles and their own ability will have been impaired to such an extent as to detract considerably from the shooting efficiency of the company or squadron.

During the last two or three years it has not escaped notice that many commanding officers, in their desire to improve the shooting of their regiments, have over-expended the amount of ammunition allotted by Government and have had to meet the extra expense involved from regimental funds. The amounts involved vary from Rs. 500 to Rs. 4,000 per regiment, and it is open to question whether these excessive outlays are justified by the results obtained, especially as we hear complaints

on all sides that the appliances available in regiments for field practices are inadequate. I cannot help thinking that in the majority of cases the extra ammunition purchased has been devoted almost entirely to making the men better "range" shots, or in other words to getting a better "figure of merit" which is chiefly obtainable by shooting conducted on the range. A man, of course, must be a good "range" shot before he can be expected to do any good at his field practices. range shooting is only the stepping stone to the field shooting, and a commanding officer who has the moral courage to give practical results a higher place than paper ones, will do well to consider twice before spending any available regimental funds at his disposal entirely on range work. It is now quite clearly laid down in the regulations that a soldier who becomes a marksman can be excused from firing the regular classification practices every second year. I hope this privilege will soon be extended to first class shots for with the very high standard now demanded a first class shot is to all intents and purposes as good as a marksman. I would like further to see this very practical and encouraging ruling specify that only the marksmen and first class shots who show that they are capable of attaining these degrees of efficiency on the range without the assistance of instructors, should be excused the next year's course on the range. This would, in my opinion, give a great impetus to the individual training of the men, and would certainly bring home to every officer and non-commissioned officer in a practical manner the importance of directing their efforts to making the men self-reliant shots, which should be the aim and object of all our training. Commanding officers who read the regulation in this light must admit that its effect will be to place two or three hundred men per battalion annually on their hands for whom an entirely practical training in the field will have to be arranged, and to meet which I cannot conceive any better or more payable investment for a few hundred rupees of surplus regimental cash than its investment in plant for field firing exercises.

The company commanders should be called upon to carefully consider and submit proposals for carrying out their individual-off-the-range practices. Each scheme, which should be as simple and practical as possible, should say what targets and appliances will be required to permit of the practice being carried out, and the probable cost of the same. regiments there are, of course, only four or five permanent company commanders present who are keenly interested in the shooting of their companies, and whose opinion would be worthy As soon as the schemes are received the of consideration. commanding officer would do well to go through them with all the officers, discuss the merits and demerits of each; select the ones which are considered sound and practicable, and see that the method of conducting, and the object each scheme has in view, are thoroughly understood by all. The quartermaster, who should always be present, would then be directed to provide the targets, ropes, etc., required, and each company commander would understand that his marksmen and first class shots are, during the ensuing year, to be put through the complete course arranged for. During the execution of the practices each company commander should make notes for the modification or improvement of each practice, so that when again called upon at the commencement of the next musketry year he may be in a position to introduce variety and new ideas into his proposals. This procedure will not only ensure variety and progress in the work annually performed but will make certain that the company commanders are not only responsible for the efficient training of their men but that they actively participate in the preparation for, as well as the conduct of it.

### CHAPTER XIII.

# INDIVIDUAL SHOOTING IN THE FIELD.

## FIRST DAY.

OBJECT OF THE PRACTICE.—To impress on each man the importance of accurately judging distance.

TARGET.—Khaki coloured, representing a man standing. Five feet eight inches high and two feet wide in the centre. It should be placed on the near slope of a ridge, bank, or any butt-like formation of the ground. A green or white background which shows up the khaki target should be selected for the first day's shoot.

MARKER.—The marker should be placed under cover or in a hole five or six yards to the right or left front of the target and instructed to signal nothing but hits, which he can do by raising a small white flag when a bullet strikes the target.

CONDUCT OF THE PRACTICE.—I am quite opposed to the practice which exists in nearly every regiment of ordering the men to parade at the place where the firing is to take place. An officer who does this loses valuable opportunities of combining other work, such as judging distance, training in observation, etc., with that of shooting. I have always maintained that in a long service army such as ours fortunately is, the men, if systematically and methodically trained, can be made very efficient soldiers in three years, and that after that period has elapsed, six or, at the outside, nine months' work annually should suffice to keep them efficient. But although attempts are being made nowadays to make the training more progressive by allotting definite periods for company, battalion, and brigade training, I still incline to the opinion that there is little system or method in the training of the soldier. Battalions,

brigades, and divisions may manœuvre with perfect precision, the staff may learn how to issue orders and the commanders how to control and direct, but with all this the fighting efficiency of our Army depends eventually on the standard of efficiency attained by the individual soldier in the ranks, and no pains should be spared until the British soldier has been made beyond all question the finest soldier in the world. In ordering, as stated above, the men to parade at the point where the shooting is to take place, the company or squadron commander overlooks the fact that he is making his men march two, three, or even four miles daily without any aim whatever except to reach the rendezvous and return to barracks. The officer rides or bikes straight to the point of assembly, orders the firing to begin, signs the registers and rides back to his quarters. He will thus spend a whole month in doing nothing else but shooting, and at the end of it he will begin worrying the adjutant for another two weeks wherein to do his judging distance training It may not be convenient for the regimental and test practices. staff to fall in with his wishes at the time, and so his company is again brought on the roster for duty, and he again resigns himself to the humdrum "kill-time" barrack work. Eventually he gets his company detailed in regimental orders for judging distance on various days, and he goes on with this until it is And so on throughout the year, the twelve months concluded. being taken up in doing what could, at any rate with soldiers of more than three years' service, be done in six months. During the individual-off-the-range shooting, the men should not only be taught to shoot quickly and intelligently, but they should be intelligently trained to perform, thoroughly and efficiently, every duty that may fall to their lot in war. should be trained to judge distance, to note the lie of the ground, to observe, to scout, to patrol, to use the pick and shovel, to improvise cover for themselves, to defend bridges, banks, posts, houses, etc., and to construct loopholes and provide headcover, all of which go hand in hand with shooting. It is only in this way and during the execution of the individual-off-the-

range practices that the twenty or thirty marksmen and first class shots in the company or squadron can be trained to a high standard of individual efficiency and practised in thinking and acting for themselves. The company or double company of 125 or 250 men is much too large to permit of this, and during the few days which should suffice for the company or double-company training only the larger tactical exercises such as are suitable for these units should be practised, for the individual soldier cannot receive attention when such numbers are concerned. Let us now accompany the company commander through the first day's work of his individual shooting in the field with his marksmen and first class shots. The place where the shooting is to take place is two miles from The men are formed up on the barrack square. The officer joins them there, and in order that they may fully understand the object he has in view and to enable him to enlist their sympathies and arouse their interest, he speaks to them as follows:--" Now, men, I am glad to see so many of you formed up here to-day. During last year, although the standard of efficiency demanded nowadays in range shooting is a very high one, you all managed to become either marksmen or This shows that you must have worked hard first class shots. and honestly endeavoured to make yourselves efficient as far as that part of your training is concerned, and no one appreciates your efforts more than I do. But you are not yet efficient There is still a great deal to be done before I can feel satisfied that you are, man for man, better fighting men than the soldiers of any other army in existence. But I am determined to make you such, and judging by the keen interest you took in your range shooting last year I feel perfectly confident that you will do your best to assist me in making you self-reliant, capable, and able fighting men. You are now in your third year of service, and you are as efficient to-day as any German or other foreign soldier ever is, because after two or three years' service they are sent away to civil life again. Even if they are all second and third class shots at the end of

the second or third year they get no more training, and you all know very well that a man does not attain a very high standard of efficiency in shooting during the first two years of his service. You men, however, are going to be with me for the next four or five years, and, in fact, I hope for a great many more years. I am therefore not going to rest satisfied with the same standard of efficiency in shooting as that obtaining in the two years' service conscript armies of the Continent. Your training to-day begins where theirs leaves off, and if I am lucky enough to be with you for the next two or three years I intend to make each of you, in fighting ability, in field-craft, and in knowledge of your work, equal to any two or three foreigners that may ever fire a shot at you in anger. On the range last year you proved to me that, provided you know the distance and the targets can be distinctly seen, you Now, however, you will be asked to can shoot very well. judge the distance yourselves and hit the supposed enemy; to shoot quickly and show that you can take advantage of fleeting opportunities; to scout towards an enemy and shoot him; to retire and still continue firing effectively; to shoot an enemy approaching your position and also one retiring from it; to improvise cover and to use the pick and shovel; in fact, you will be taught everything that modern military thought suggests as necessary to ensure your being splendid fighting men."

There is nothing derogatory, as some would have us suppose, in thus talking to the men. In fact it is only right and proper that a squadron or company commander should take his men into his confidence, tell them plainly their shortcomings, and seek their active and willing co-operation in any work he wishes them to do well. He now moves them off and after going a few hundred paces, halts them, points out a tree some distance to their right or left front, and asks them to form their opinions as to how far off it is. Two or three men are then asked to say what they think the distance is. The squad then, headed by the officer, paces the distance, and on arrival at the tree, the officer announces the result. A man who gives the correct

answer is praised and noted, the advantage his correct judging gives him in shooting explained, and his importance as a member of the company pointed out. It should be carefully explained to all the men, that a man who can be relied upon to invariably give the correct distance of any object up to 600 or even 800 yards is a very important and useful man indeed since he enables the squad or section commander to bring the whole of the bullets of the squad or section on to the enemy at The errors made by the other men should then be considered and the effect of such errors on the shooting pointed The commander should remember that it is quite impossible to make every man a good judge of distance. never can and never will judge distance well even if they remain in the Army until they are grey-headed. Errors should therefore be treated with consideration and the men making them should be sympathetically encouraged to try and do better next If the officer has the men with him in his work he will time. have no difficulty in getting those who make errors, but who are likely to be eventually good judges of distance, to practise estimating distances during their evening walks. In any case nunishment should never be resorted to in dealing with men who make mistakes in estimating the range. Another object ahead of the squad is now selected and the same procedure The officer now turns to the men and tells them that a soldier to be efficient in the field, must be observant: that he must when marching across country or when moving with a patrol keep his eyes about him, note the features of the country to his right and left, and be able to say at any time what he has seen. He then tests one or two of the men somewhat as follows:--

Company Commander.—Now, Private Smith, what have you seen since you left camp?

Private Smith.—I saw an artilleryman.

Company Commander.—How far away was he when you saw him?

Private Smith.—He was about a quarter of a mile away on our right.

Company Commander.—Where was he coming from?

Private Smith.—From the direction of the Supply and Transport Lines.

Company Commander. In which direction was he going? Private Smith.—He was following the road to Bellary.

Company Commander. -- Yes, you saw the artilleryman. Did you see anything else?

Private Smith.-No, sir.

Company Commander.-- I think there are other things that you might have noted. Let us see what Private Thompson saw.

Private Thompson.—I saw the artilleryman, and I saw some country carts besides.

Company Commander.—Yes, I noticed them also. Where were they when you saw them?

Private Thompson. -They were about a mile away and crossing our front.

Company Commander .-- How many were there?

Private Thompson.—I cannot say but I think there were three.

Company Commander.—That shows that you could not have taken much notice of them. There were five. Were they drawn by bullocks or horses?

Private Thompson.- By bullocks, sir.

Company Commander.--Were they coming from the North, South, East, or West?

Private Thompson.--I cannot say, sir.

Company Commander.—That is a pity. When a man comes into camp, who has seen a battery of artillery or a squadron of cavalry he ought to be able to tell his commander whence it was coming and the compass direction in which it was moving, otherwise the information is not of much use. I am surprised at finding a man like you, of three years' service, who does not know the points of the compass. The next time we come out I shall expect you all to know where the

North or West is, otherwise you will have to sit down here until you all do know. I am not going to tell you either, for such a simple thing you can, if you try, find out for yourselves.

The squad now moves off again and halts at the foot of the slope from the top of which the day's firing is to take place. The officer crawls up to the top and cautiously looks over. lowers the red flag to intimate to the marker that he must get under cover. He then calls quietly to Private Iones to come up to him. As Private Jones comes up he tells him to peep over the ridge, and at the same time addresses him as follows:--" Now, Jones, you are one of a patrol, and one of the enemy's scouts has just come over that ridge in front of you, and is now standing there apparently examining the country with his glasses. The ground about here is so open that if you try to get any closer to him he will certainly see you and run away. If we can get him, he may give us very valuable He may tell us the name of his regiment, where information. he has come from, the name of his commander and whether he has any artillery with him. You must therefore try and shoot him. Now make up your mind as to the distance he is from you, adjust your backsight accordingly, and fire." The man fires and the dust flies up about two feet below the target.

Company Commander.—What happened?
Private Jones.—I missed him, sir.
Company Commander.—How do you know?
Private Jones.—I saw the dust fly up below him.
Company Commander.—Where did you aim?
Private Jones.—At the centre of the figure.
Company Commander.—Were you quite steady?
Private Jones.—Yes, sir, I felt quite certain I had hit him.
Company Commander.—What elevation did you use?
Private Jones.—350 yards, sir.

Company Commander.—That accounts for it. The target is fully 500 yards from here. Now what does that shot teach you?

- Private Jones.—It teaches me that I ought to be a good judge of distance otherwise I shall not be able to hit the enemy.
- Company Commander.—Yes I am glad you see that point for it is a very important one. You may have walked many miles to-day with your patrol, and see how disappointing it is to find that after so much trouble and wearisome marching, you miss the chance of capturing one of the enemy's scouts through being a bad judge of distance. Now put your sight up to 500 yards and try another shot.
- Private Jones fires again and hits the man, the marker signalling the hit.
- Company Commander.—Well done, Jones. I thought you could hit him if you knew the range. You must try and improve in judging distance for there are many occasions in war, such as this, when I shall not be near you to tell you the distance. You can now return to barracks, and on your way do two or three practices in judging distance on any objects that present themselves.

The remainder of the squad should be dealt with in the same way and at the conclusion of the first day's practice every man should return to barracks thoroughly impressed with the importance of judging distance accurately at decisive ranges.

SECOND DAY.

OBJECT OF THE PRACTICE.—To teach each man the importance of invisibility.

TARGET.—A khaki coloured figure representing a man kneeling or sitting. It should be again placed on the near slope of a hill, but instead of having a white or green back-ground as yesterday, it should have a brown rock or dry grass, which approximates khaki cloth in colour, behind it.

CONDUCT OF PRACTICE.—The men should again be marched out under one of the officers, doing a few judging distance and observation exercises on the way. They should be reminded

of the previous day's shooting, and the misses they made owing to their inability to judge distance correctly. On arrival at a point about 500 yards from the target they should be halted in a position whence the hill on which the target is placed can be seen by all. They are told the target is on the hill, that it is not concealed, and they are asked to look carefully and see if they can locate it. They reply in the negative. They are then moved up 50 yards nearer and again asked to locate it. They again fail to do so. And so they are moved up by degrees until perhaps at 300 or 350 yards one of them sees it and points it out to the officer.

Company Commander.—Now, Private Smith, what range did you fire at yesterday?

Private Smith.- 500 yards, sir.

Company Commander.—Yes, and could you see the target distinctly?

Private Smith.—Yes. I saw it yesterday quite clearly, sir. Company Commander.—But to-day you could not see it at 500 yards although it is of the same colour as the target you fired at yesterday. How do you account for this, Private Jones?

Private Jones .-- It is much smaller to-day, sir.

Company Commander.—Yes, it is smaller to-day. It represents a man kneeling. But if I put a man kneeling on the ground here do you not think you would see him at 500 yards?

Private Jones.—Yes. I am sure I could, sir.

Company Commander.—Well there must be some other reason for you could not see the target to-day until you arrived here which is very close to the hill indeed. Is there any man in the squad who can suggest any reason for the target being so difficult to see?

Private Thomas.—I think it is because the back-ground is the same colour as the target and therefore does not show it up, sir.

Company Commander!—You are quite right, Thomas, and I am glad you noticed this point for it is a very

important one for soldiers to remember and make use The target is khaki coloured and because there is a brown rock behind it, it cannot be seen, and if it had been an enemy sitting there he would, if he were a good shot and fired carefully, have shot perhaps the whole of us before we could have located him. The Boers were up to this dodge and at Colenso. Stormberg, and many other places they took care to see that when they sat down on a position, they had rocks or dry grass the same colour as their brown clothes behind them, and our men fired hundreds of thousands of rounds at the hills without killing a single Boer because they could not see them. hope you all understand this, and, later on when we are doing squad and section firing, I shall ask you to go on a hill and place yourselves in position to defend it. I am not going to put each of you in position for you are old enough to be able to do that yourselves, but I shall be very angry if I find a single one of you sitting down with a white rock or black earth behind you because that will enable the enemy to see you, like the target you fired at yesterday at 500 or 600 yards, and then you will be the first to get hit, and many of you will lose your lives through pure stupidity. I shall refer to this subject again when we actually carry out the practice, and I will tell you how much more confidence you will have and how much better you will shoot when you feel quite certain that the enemy cannot see you.

The company commander now proceeds with the practice. Each man judges the distance, fires, and reports where his shot has struck. If a man miscalculates the range and misses his first shot, he should not be told the correct distance but should be forced to observe the strike of his shot, use his own judgment as to the alteration in elevation required, and fire again until he does hit the target.

Thus in two days each man has been thoroughly impressed with the importance of three factors in his training for war which are of the greatest importance and utility, viz:—

- (a) That he must be able to judge distance accurately at decisive ranges otherwise he will fail to hit his opponent.
- (b) That he must carefully watch for the strike of each shot he fires otherwise he will waste the whole of his ammunition and do no good in the field.
- (c) That invisibility is an important factor which if properly utilised enables him to shoot his enemy without being seen himself.

I do not intend to go so minutely into the succeeding exercises, but there is one point I would invite the attention of all squadron and company commanders to in these first two exercises, and that is that I have actually told the men very little. The points to be borne in mind have been elicited from them. They have told me what is required to make them shoot better and this method should be followed throughout the remainder of the course, the men being forced to use their eyes and heads, to think for themselves, and say in their own words what should be done or what is required in each situation. The soldier's course of training is essentially practical and it is quite within his power not only to do it but to say beforehand how it should be done.

## THIRD DAY.

OBJECT OF PRACTICE.—Same as on the first day.

TARGET.—Representing a cavalryman who has ridden up to a point about 700 yards away, and is supposed to be reconnoitring our position.

CONDUCT OF PRACTICE.—The position selected for the target should be in an entirely new direction and on the way from the camp to the firing point the men should be exercised as scouts preceding the advance to an attack. Each man to judge the distance and shoot until a hit is made.

## FOURTH DAY.

OBJECT OF THE PRACTICE.—To teach each man how to advance undetected to decisive range, and shoot the enemy.

TARGET.—Same as on the first day. The marker to be provided with an ordinary piece of looking glass or mirror, which should be so placed that he can, from his position under cover, see the ground between himself and the point where the men are formed up, and so be able to follow the movements of any man who shows himself within this space. He should also be provided with a rifle and 50 rounds of blank ammunition. His instructions are to keep his eye fixed on the mirror and watch for the individual skirmishers. Should he see one, he at once fires a blank cartridge in the air and lowers the target. After a few seconds he again raises the target and watches the mirror for the appearance of the next man.

CONDUCT OF PRACTICE .-- The squad is halted under cover, and one man called up. The target is pointed out to him and the officer addresses him somewhat as follows: "The enemy's scout appears to me to be about 700 yards away, and I don't think you can make sure of hitting him if you fire from here. The ground in front is strewn with rocks and bits of bush and I would like you to try and get up a little closer to him before Take care, however, that you do not let him see you shoot. you or he may shoot you and then go away. When you get behind a bush or a rock you should peep past the side of it or look carefully over the top, make sure the enemy's scout is still there, examine the ground to your right and left and ahead of you, and if you think you cannot get any closer without being seen, try your luck, estimate the range, take careful aim and fire." Private Harris says he quite understands, crawls down the slope and moving forward on his hands and knees reaches a rock about twenty yards away. After resting there a few seconds, looking at the target and examining the ground in his vicinity, he moves out to the right front in a stooping position. He has not gone more than three or four paces, however, when the enemy's scout (the marker) fires a shot and the target disappears. Harris, on hearing the shot, falls flat on the

ground, and after looking in the direction from whence the shot came turns to his company commander and very disappointedly calls out, "He's gone, sir." The officer goes forward to the rock and calls Harris to him. He discusses the ground in the vicinity with the soldier, gets the latter to say eventually that the ground he attempted to cross was clearly under view from the point of view of the enemy's scout and that he ought not to have attempted to cross it. He explains to him that all soldiers must take risks in war, but that the risk should be one that gives a reasonable hope of achieving something as the result of it. "In this case, Harris, your idea was to get as close to the enemy as possible and shoot him, and if you thought you could not cross the ground to your right front without being seen, and if there was no other way of getting further forward, you should have fired from behind this rock. In any case the enemy's scout saw you, had a shot at you, and then went over the rise and is probably riding away now to tell his officer that he saw one of the enemy at this place. So instead of our bagging him and getting valuable information from him he has now gone off with information that may prove to be of great use to his commander. This is very disappointing, as I expect you men to be better scouts, and quicker, and more reliable shots than any of our possible enemies. I cannot allow you to return to barracks to-day until you prove to me that you can do better than this. Go and sit down on that knoll and watch how the other men perform." The practice is thus continued. If a man succeeds in getting up fairly close and in getting his shot on the target he is praised, held up as an example to the onlookers who have failed, and allowed to return to quarters.

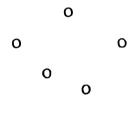
#### FIFTH DAY.

OBJECT.—To teach each man to shoot quickly, at short ranges, objects which appear and disappear at short intervals and at different and unexpected places.

TARGETS.—Four or five in number. Each target two feet square consisting of khaki cloth stretched on a wooden frame,

or of white cloth with a man's head and shoulders painted on it. Each target to be provided with and nailed on a handle of such length that the marker can raise the target above the parapet without exposing his hand or arm. When sitting in the hole he has prepared, the marker's head should be at least one foot below the surface of the ground and when raising the target he should not have to raise his hand higher than his own face. This ensures his safety.

CONDUCT OF PRACTICE.—The four or five holes should be dug at irregular intervals between 200 and 350 yards from the point selected for the firer's position thus:—



## ☐ I Firer.

In conducting this practice, in fact in carrying out any practice off the range such as we are discussing, the company commander should always assume that his men are acting in seme such capacity as they will be called upon to act on service. They must not be merely allowed to stand in the open and fire away their ammunition. For this day's practice he might tell the soldier that he is on the defensive holding this ridge, or that nullah, and order him to improvise cover from the materials available. Provided with six or eight rounds of ammunition, and having taken up his position, either lying down or kneeling, behind cover, he should be told that the enemy has managed to get close to his position and that it is his business to shoot him as opportunities offer. The bugler now sounds the "Commence Fire." The markers put their targets up,

count four or five in slow time and lower them again; and after a second or two, continue the motion. The marker in the hole nearest the firer should be instructed to show his target twice and then discontinue showing it. This prevents the firer from firing all his rounds at the nearest target which is often done on the range. The men firing should be given one minute or a minute and a half wherein to fire off their ammunition and each man should be forced to fire at least six out of his eight rounds in this time. This forces him to fire at the different targets as they present themselves which is the spirit in which the practice should be conducted. All the devices and tricks to obtain good results, which unfortunately are so common on the range or where annual practices counting towards the "figure of merit" are executed, should be promptly and severely repressed. The company commander explains to the soldier that he wishes to see whether he can hit an enemy who shows himself at different places at different times, asks him if he quite understands, and directs the practice to begin. after that, he sees the man deliberately waiting for one particular target to come up he should stop his shooting at once, debit him with the cost of any rounds he has thus fired, and make him repeat the practice after all the other men have "Figure of Merit" shooting is much too common in our Army and until battalion and company commanders unanimously repress it we cannot form any reliable opinion as to the field-value of our shooting.

#### SIXTH DAY.

OBJECT OF THE PRACTICE.—To give each man confidence in his ability to hit an enemy advancing against him.

TARGETS.—Man-figure targets, four or five in number, each five feet eight inches high and two feet wide. The frames should be thin and as light as possible. A piece of wood two or two-and-a-half inches wide and projecting three feet below the target to act as a handle should be nailed to the back of it.

CONDUCT OF PRACTICE.—Five holes are dug at different places between 650 and 250 yards. They should not be in a straight

line but to the right and left of each other looking at them from the firing point, so that they will force the firer to fire to his right and left front. All rifle-range shooting habituates the men to one kind of firing only, viz., straight to the front. schemes for individual field firing should discountenance this habit and constantly give the man practice in watching for and in firing at an enemy approaching him from directions other than straight ahead of him. A marker provided with a stopwatch should be seated in each trench. On the "Commence Fire" sounding the marker in the most distant trench raises his target three times keeping it exposed for 15 seconds each time, and with an interval of at least 30 seconds between each exposure. Shortly after it has been lowered the third time the marker in number 4 trench, who should be provided with sufficient head cover to permit his watching the movements of No. 5 target, raises his target three times in the same way. This should be continued by the other markers until the practice is concluded. To the man at the firing point it should be explained that the enemy's firing line has arrived at a certain place in front of him, that it is advancing by rushes of about 50 yards at a time, and that as soon as the enemy appears he must judge the distance and shoot him. The trenches should be concealed to prevent his seeing them and judging the distance before the target appears. As ammunition will not permit of each man firing 15 rounds at a practice he might be told that he should merely observe the enemy at his first rush, form his opinion as to the distance, and shoot him the next time he gets up, and so on at the fourth and seventh rush if he wishes. During the practice each man should be carefully watched to see if he is looking for the strike of his bullets and correcting his elevation accordingly. At the conclusion of the practice it should be explained to each man that it was assumed that the enemy were advancing by rushes of 50 or 60 yards at a time, and that the target was exposed for 15 seconds because it takes a soldier weighted with ammunition and running in a stooping position about that time to run 50 yards.

Company Commander.—Now, Smith, did you have plenty of time to fire deliberately and shoot the enemy each time he got up?

Private Smith. Yes, sir, I had so much time that I could have fired two shots at each rush.

Company Commander.—Well that enemy was advancing by rushes of 50 yards at a time, and you say you could easily have fired two shots at time each time. Now if you were attacking a position do you think, at such short ranges, you should try and advance by such long rushes which would enable the enemy to fire two well-aimed shots at you each time?

Private Smith. No, sir, I think there would be more chance of my getting to the position if I advanced by short rushes, say of 10 or 15 yards at a time.

Company Commander.- Why do you think that?

Private Smith. Because if I advanced by very short rushes he would not have time to aim carefully at me.

Company Commander.—Yes, that is quite right, Smith, and I am glad you understand that, and when you are advancing to attack a position and you have arrived at fairly close range, say 600 or 800 yards, you must not make such long rushes as will enable the enemy to take careful aim at you. On the other hand, judging by your shooting to-day, in which you have made four hits out of ten rounds fired, I feel certain that, if you keep cool and fire as you have done to-day, you will be able to knock over a good many of the enemy who come within effective range of your rifle.

### SEVENTH DAY.

OBJECT OF THE PRACTICE.—To teach the man that when he has driven an enemy from a position he must at once, without waiting for orders, direct a steady and well-aimed fire on the retiring enemy.

TARGETS .- Same as on the sixth day.

CONDUCT OF PRACTICE.—Same as on the sixth day, excepting, of course, that the nearest target to the firer is now raised first, and the most distant one, last. For this practice company commanders should take care not to bring the targets too close. In fact, our men require more practice in long range shooting than has hitherto been considered advisable by theorists or useful by musketry experts. When an enemy has been driven from a position, he is never found dawdling about within 100 or 300 yards of it. His principal object will be to get to cover a couple or three miles away or perhaps more, and the victors should, if their men have been carefully trained to fire intelligently and carefully at such retiring masses or crowds, be able to inflict enormous losses with the rifle even up to a distance of The rifle of to-day is quite as effective as the field gun of Sedan and Gravelotte days in confirming a victory, in inflicting losses on the retreating enemy, and in completing his demoralisation, and it is the company commander's business to see that each man knows and understands this, and that the targets are not fixed too close to the firers.

## EIGHTH DAY.

OBJECT OF THE PRACTICE.—In the previous day's work each man was told to skirmish up to a position, seize it, and then at once open a careful and well-aimed fire on the retreating enemy. It should have been impressed on each man that excitement and hurry are detrimental to good shooting on such occasions, and that he must make up his mind to pull himself together, lie down quietly and fire slowly, determinedly and, above all, accurately. Each man must thoroughly understand that it is better to sit down, try and overcome the excitement of the last triumphant rush, and shoot deliberately and calmly, than to rush headlong after the enemy, firing wildly and missing nine shots out of ten. In the good old days, the man should be told, when the rifles were effective only up to 300 and 400 yards, it was necessary to pursue him actually in person otherwise he would soon be beyond effective range, but with

our present rifle, we can, if we shoot calmly, keep on killing and wounding the enemy until he is a mile away. This is one of the many advantages that we can make use of because we have a long-range rifle and it is the business of the officer to see, that each man comprehends such points and knows how to practically and intelligently make use of them at the proper time. To-day the men should each carry either a pick or a shovel. The same exercise as yesterday should be performed, the men moving up to the position, and firing (blank will do for to-day to save ball being fired twice at the same practice) at the retiring enemy until he is out of range. The company commander now orders the "Cease Fire" and calling his men together speaks to them as follows:—

Company Commander.—Private Harris, just tell me what you did at yesterday's practice.

Private Harris.—I seized this position, sir, and then fired at the enemy going away.

Company Commander.—How did you shoot? Did you, as soon as you reached here, begin shooting as quickly as you could load?

Private Harris.—No, sir, I loaded quickly but I fired slowly and carefully.

Company Commander.—That is just what I wanted to know. In fact you made up your mind to try and hit one of the enemy with each shot you fired.

Private Harris. -Yes, sir.

Company Commander.—But you must have been out of breath when you got here, and that surely affected your shooting.

Private Harris.—Yes, I was, sir. I tried to fire as soon as I arrived here but I was very shaky so I sat down behind that rock and waited a few seconds before I began to fire.

Company Commander.—Yes, and out of ten shots fired you got six hits.

Private Harris.-Yes, sir.

Company Commander.—How many hits do you think you would have got had you begun shooting immediately you reached the top when you were breathing quickly? Private Harris.—It would have been a fluke if I got any, sir, because I could not hold my rifle steady.

Company Commander (turning to the men).—" Now, men, you have all heard the conversation between Harris and myself, and if you all have learned as much from vesterday's practice as he has, and if you carry out what he has said in war, you will make it so hot for any enemy leaving a position that those who escape will not want to come within range of your rifles again as long as they live. Remember, it is not the number of rounds you fire away but the accuracy of your fire that demoralises an enemy and increases your confi-Now, having seized this position and driven dence. the enemy away with heavy losses we must make ourselves secure here for the rest of the day and perhaps for to-morrow also, for battles nowadays may last for several days and nights, and success will go to that Army whose men know how to take care of their ammunition, shoot calmly and accurately, and use the pick and shovel. We have to entrench or improvise cover for ourselves and to-day I want to see what each one of you knows about this important part of your duty. Hitherto, in our Army all entrenching has been done by companies and halfcompanies in which the commander selected the line of trench, measured its dimensions, marked out how much each man was to do and in fact did everything for them except the actual digging. I think, however, that you men should be capable of more than this; you should know how much cover is required to temporarily protect you; you should know how to scoop out the ground or pile it up so that you can sit down comfortably and if necessary fight without inconvenience

for several hours, and you should also know that your cover must permit of your seeing the enemy and shooting him while still a long way off. Anyhow, I am not going to tell you every little detail. I want you to show me what you can do first and then I will perhaps assist you with my advice."

The men should now be extended along the position and allowed to select their own sites for entrenching themselves and begin work. At the conclusion of the work, the company commander should assemble all the men and, taking them with him, visit each task in turn, criticising the performances, and above all endeavouring to elicit from the men themselves the defects of each. One man has made his cover in such a position that there is no field of fire, another has put up a few small stones than can be knocked down with a stick, another has no flank defence, another has made no attempt to conceal his work, and another has built his cover on the skyline. Each and all of these defects can be elicited from the men by a little patient and judicious questioning. The men should be taken to another position the next day and directed to perform the work again until each man can construct cover quickly and efficiently. The work should then be done once or twice by night and the utility and importance of such night work should be impressed on them.

With these observations on the training of the individual soldier I propose to close this chapter. Not that I consider their training ends here for there is still a great deal to be done and repeated year after year before the company commander can rest satisfied that his men are individually capable of combating the exacting requirements of modern fighting. I trust, however, that I have given sufficient examples to show how the practical training of the soldier to act with confidence and intelligence can be carried out in peace time. Notwithstanding the amount of cold water that has been thrown on the Boer war as a war from which anything could be learned, there is no doubt whatever in my mind that it proved most conclusively

that in the field, in the attack, and on the defence, the British soldier was, as a fighting man, tactically inferior to the Boer. The war in the Far East has also shown in the same conclusive way that the Russian soldier, in field craft, in practical shooting, and in individual intelligence, was far and away the inferior of the Jap. There may be some excuse for the Russian soldier, but there is absolutely none for the British soldier who is with the colours for seven, ten, and fifteen years as opposed to the two years' service soldier of foreign armies. Trained as they might be trained on progressive lines, with method and system, our soldiers should unquestionably be the superiors of any fighting men in the world. On our heads lies the responsibility; let us show that we are equal to the occasion.

### CHAPTER XIV.

In the last chapter I endeavoured to point out the general method that should be adopted in the training of the soldier in the field. I gave eight examples taken at random from different portions of his work and conducted him through each of these eight exercises. I hope, however, that no company or squadron commander will stop where I have stopped. conceivable situation in which the soldier may be expected to find himself in the field should be taken in hand and similarly dealt with. In this way sufficient exercises to permit of at least one complete month's training on these lines can be easily evolved. And this is not a bit too much when it is remembered that the thirty men I have been dealing with are excused all shooting on the range. I feel certain, although I have no authority for saying so, that in letting these men off their annual-range course, it is not the intention of the Commander-in-Chief that they should do no shooting or that their ammunition should all be expended by other men on the range. Such a procedure would unquestionably be a retrograde step. The question of ammunition is always a troublesome one, but with practices that require only two rounds per man one day, and three rounds per man on another, the fifty or sixty rounds which I think should be expended in these practices, will go a long way. Whenever the exercise is in any way complicated it is extremely advisable to put the men through it with blank on one day and with ball the next. Without going into any further detail as to how the practices should be conducted I suggest the following points with which each man should be made thoroughly competent before they are taken to the squad and sectional practices, and which would form the basis for further schemes. These must not be considered to be in any way exhaustive.

#### SUPPLEMENTARY EXERCISES.

- (1) To show the men by practical illustration the advantages and disadvantages of short and long rushes.
- (2) To let each man realise from actually doing it how difficult it is to shoot well if he begins to shoot immediately after a long rush when his chest is heaving.
- (3) The men to be placed on a defensive position and to be shown by practical example the vulnerability of men—
  - (a) making long rushes,
  - (b) making short rushes.

This can best be done by giving them blank and ordering them to fire, first at a squad advancing by long rushes of 100 yards at a time, and then at a squad advancing by short rushes of 10 to 15 paces at a time.

- (4) Each man should, in the same way, be shown by actual illustration the comparative vulnerability of—
  - (a) squads rushing forward in regular sequence from right to left, as compared with
  - (b) squads rushing forward at irregular intervals from different parts of the attacking line.
- (5) Each soldier should be shown by actual illustration how difficult it is to hit or even see a line of infantry lying down at 1,000 yards or over.
- (6) Each man must be thoroughly impressed with the importance of concealment from view and fire. This must be done by actual illustration in the field, first on the defensive and then in the attack.
- (7) Each man must clearly understand how movement of any sort discloses his position at much greater distances than would be the case if he remains quite still.
- (8) Each man must understand how to conceal his trench, and how to protect himself on every occasion from flank and enfillade fire.

- (9) Each man must be able to provide himself with substantial head cover and make loopholes giving him a wide range of fire.
- (10) Each man must know the object of a holding attack and how he should expend his ammunition when carrying it out.
- (11) Each man must show by practical exemplification that he knows how and when to use covering fire and mutual supporting fire.
- (12) Each man must understand the great importance of flank, enfilade, and concentric fire and how they are to be attained in various tactical situations.
- (13) Each man must be made to see the uselessness of a dispersed fire.
- (14) Each man must understand the great importance of surprise by fire, and must be taught how to entice his enemy within range and then shoot him.
- (15) Each man must be able to describe briefly the point on which he has located the enemy, explain it to his comrades on his right and left and so ensure its being passed along the line.
- (16) Each man must be impressed with the importance of communicating his backsight elevation to his comrades when he sees that his shot has struck the target or the enemy.
- (17) Each man must be able to entrench himself by night.
- (18) Each soldier must understand how to take advantage of the flat trajectory of his rifle. He can best show this by the positions he takes up on the defensive.
- (19) When firing from a ridge each man must understand how important it is to keep his bullets just in front of an advancing line.
- (20) Each man must know what is meant by a good and a bad field of fire and must show by the position he takes up on varying ground that he knows how to make use of this knowledge.

- (21) Each soldier must be as capable of firing up or down hill as on the level and should also be shown by practical examples the allowance he must make in elevation when so firing as compared with firing on the level range.
- (22) Each man must not only know how to dig himself into the ground and provide head cover and loopholes giving him a good field of fire and protection from shrapnel as well as rifle fire, but must be impressed with the importance of ensuring his position being a comfortable one so that he can sit in it for several hours without restraint.
  - NOTE.-With reference to the above a most common mistake in all our trench and cover work at the present time is that the work is of much too flimsy and temporary a nature, and the men are so cramped and forced to assume such uncomfortable positions that if they were forced to remain in such positions for more than an hour it would be most painful, and many of them would, from sheer exhaustion, lie down and take no further interest in the proceedings as happened many times in South Africa. Furthermore. cramped positions must certainly detract enormously from the accuracy of the fire, especially when the latter is prolonged, as it often will be in the future, for many hours and even days.
- (23) During every field firing exercise, and after the work has been in progress some time, each man should be asked to say what the idea is that the company commander is carrying out. This forces them to pay attention to the preliminary instructions and gives the company commander confidence that each man, by thoroughly grasping the idea, will be capable of carrying it out to the end.
- (24) The rifle gets so hot after firing forty or fifty rounds fairly quickly that it is almost impossible to either hold it with the left hand or touch the backsight. This is a great defect and some provision should be made to overcome it, but until this is done each

man should be made acquainted with this fact and impressed with the importance of being prepared to improvise something to meet the difficulty. During the recent course of instruction at the School of Musketry the new short rifle was used. It was found by experiment that after firing fifty rounds in an attack the bone studs on the backsight which have to be pressed to permit of the slide being moved up or down to alter the elevation became so hot that the men could not touch them or at least could not press them in.

- (25) Each man must be constantly tested to see if he recognises "dead" ground in his vicinity.
- (26) Each man must realise that "Rapid Fire" means rapid loading only, and that although he must be an expert in rapid loading he must whilst doing so keep his eyes on his enemy, watch for opportunities, and fire carefully.
- (27) Each soldier should receive occasional practice and be tested in his ability to fire whilst advancing. This should be done only at close ranges.
- (28) Each man must be frequently exercised in repeating test messages such as are likely to be required in the firing lines, such as—
  - (a) Hold on to the position you have reached, and conduct your fire as for a holding attack. (That is slow and deliberate.)
    - (b) A squadron of cavalry is approaching from the right-front. Keep concealed. Lower sights and wait for the signal to fire. (Each battalion should have a prearranged and thoroughly understood signal for suddenly opening a rapid burst of "surprise" fire.)
      - Note.—I have included the words Lower sights in the above message. There should be no necessity for this if each man has been intelligently instructed how to use the "fixed" sight at short ranges which is always necessary for "surprise" fire.

- (c) The enemy is pressing forward against the Lincolns on our right. Do not fire at them until they get so close up that they cannot get away again. Wait for my signal.
- (d) Work forward man by man to the grassy ridge in front from where we will be able to enfilade the enemy's lines. Keep concealed from the enemy to our present right front.
- (e) The enemy's artillery has seen us. Lie perfectly flat and motionless.

The above are a few samples of the kind of messages I consider a soldier should be capable of passing along to his comrades on his right or left. I wonder how many men in the British Army can do this to-day, and also how many Native soldiers can do it? On the defensive this lateral communication and conversation between officers and men should be constant when once the attack begins. It gives confidence to all ranks, ensures everybody keeping their wits about them, using their eves, and the feeling that each man is an important factor in the great events developing before him. It avoids shouting, bawling, and swearing at men who cannot hear words of command, and which only upsets the men when they should be, as Britishers only can be, calm, determined, and quiet, and it ensures that intelligent control and direction of every rifle without which everything is chaos and confusion. attack it may only be possible, owing to the breaking up of lines under fire, to maintain this firing line conversation up to 1,000 or even 800 yards from the enemy's position. But if it can be maintained up to these distances a great gain in morale and mutual confidence will be achieved. During the halts in an advance the officer should frequently steady his men just as a good rider steadies his horse by kindly words before a fence. He should be perfectly calm himself, treat the situation as a matter-of-fact one and give his short messages to the men on his right and left confidently and calmly. What does Iones (a good judge of distance) say the range is to the village in front? Can Smith (a good shot) see where his shots are striking, if so where, and what elevation is he using? These

and such other every-day peace-practice, yet important, messages should go along the line whenever a covered position has been gained, for their encouraging and steadying effect is immense. Our officers of the Indian Army should ponder these lines and ask themselves how far their 21 years' service soldiers are capable of complying with these, the unquestionable demands of modern war and wide extensions. To test the men and see how far they are capable of answering these demands, the company commander should extend a half company to five or ten paces intervals. Lie down in the centre of the line himself, with an officer at each end of the firing line. Write down in his note book three or four simple messages. message to the men to the right and left and direct the officers at the extremity of the lines to take down the message as passed to them by the soldiers on the flanks. Compare the messages received with those actually sent.

If the training of the soldier to take an intelligent interest in his individual efficiency as a fighting man is to be carried to its logical conclusion it must permeate his routine life in cantonments also. In the cavalry, for example, he must be held directly responsible for, and encouraged to take a personal interest in his horse, its feeding, grooming, and condition, until he learns to rely on his own commonsense and experience to maintain it in an efficient state, and not on the orders of his squadron commander. I am afraid the importance of this has not yet been realised in either our British or Native cavalry. The idea prevailing in most regiments appears to be that unless the colonel, major, captain, lieutenant, subadar, and jemadar are present every time the horse brush is produced the horse will not be groomed. This is all the more surprising in the Silledar cavalry because the horses here are, to all intents and purposes, the property of the men. They draw a certain pay from Government and out of this they feed and keep their horses. It is only right, therefore, that each soldier should be made to take an active and intelligent interest in his own property. This can only be done provided the present overwhelming supervision is removed. That it requires a duffadar to look after twenty men, a jemadar to supervise four duffadars, a ressaidar to direct the jemadar, a lieutenant to keep an eye on the ressaidar, a major or a captain to watch the lieutenant and a colonel to keep the major up to the collar surely indicates that the man is neither trusted to groom his horse nor feed him. Where such conditions exist there is no judging by results as far as the trooper is concerned, for all are placed on the same plane: the lazy with the energetic and the ignorant with the intelligent. There is no discrimination between those who actually do take an interest in their horses and those who do not.

For several years I have thrown the entire responsibility for the condition and efficiency of his horse on the individual trooper and I can honestly say that I have never once regretted having done so. My men soon began to see that I judged them solely by results, that the only road to my favour was through their individual efforts, and that I was soon able to distinguish between the good and the bad horsemasters in the squadron. I even allowed them to regulate the amount of feed, and invited any man whose horse was not up to the mark to make his own suggestion for change in diet. The consequence was that even when in the field twenty miles away from me I could rely on each man doing the best he could for his horse, watering him at every opportunity, grazing him during a temporary halt, and resting him at frequent intervals. I hope I will not be accused of a common human failing if I say that there gradually grew up, and became a constant source of pride and gratification to me, that mutual confidence between my men and myself which is perhaps the greatest lever to success in war.

In the infantry also, to take one example, the man must be encouraged to take a pride and intelligent interest in his rifle. When once he has been shown, and it is clear that he understands, how to keep it clean and the supreme importance of doing so, I feel certain that the soldier can be made to do himself what so many officers and non-commissioned officers

waste days and months annually in seeing done. A carpenter keeps his saw clean and well oiled because he knows his livelihood depends on it; a stonemason keeps his chisels in good order for the same reason; and tens of thousands of men in the Army are the brothers and relations of these humble artisans at Home. The fact of the matter is that because a man wears a khaki uniform he is considered to be quite incapable of doing even the most childish things without supervision. Give them a trial, inspect their work occasionally at unexpected times, note the good men, make the laggards suffer, and the men will soon show how worthy they are of the trust reposed in them. There are bound to be a few who will be found to be quite unworthy of the trust, but even if the few amount to three per cent. of the whole Army they cannot in any way detract from the immense advancement towards perfection which will accrue from the higher individual efficiency of the remaining ninety-seven per cent.

The last point regarding the individual training of the soldier on which I wish to offer a few suggestions is the present system of lecturing. Every day and in every barrack room in India we find one or other of the company or squadron officers engaged in so-called lecturing. To lecture a squad or a company of men so that they may derive lasting benefit from it is not an easy matter. The majority of our officers have, I think, felt this difficulty and in many cases they are quite at a loss as to the best way of overcoming it. I am quite in sympathy with them for the great intellectual guif that separates, at any rate, the British officer from the soldier of the Indian Army, precludes the possibilities of the former ever being able to mould his lecture-room work and to adapt his language to the needs of those whom he has to teach. same difficulty is often experienced by officers of the British Army who consider it a waste of time to lecture to the men under their command. Of the few so-called lectures I have had the opportunity of hearing I must admit that nearly all ef them were very aimless, discursive, disjointed, followed no definite line and ended nowhere in particular. In some cases a couple of pages from the drill book is read out to the men, in others thirty or forty stereotyped questions from some sergeant-major's questions and answers on company drill are fired one after the other at them. If they, or the non-commissioned officers, know any portion of the training manual by heart they will probably answer some of the conundrums to the officer's satisfaction. In any case I think that the unsuitability of the lecture, in the strict sense of the word, as a mode of instruction to be generally used with men whose standard of intelligence is not a particularly high one, and the difficulty of employing it have brought it into well merited disrepute.

My view of the case is that through lectures having to be given weekly, and often daily during training by the order of commanding and general officers, the company commanders are constantly at their wits end for something new or interesting to say. They are thus often driven to trench on subjects quite beyond the capacity of the soldier, who sits and mutely tries to grasp the duties of a colonel in command of a rear guard or a general in command of a convoy. Those who have had the patience to follow me thus far in my discussions on the training of the soldier will, if they ponder a moment over what has been written, come to the conclusion that the soldiers' course of training is an eminently practical one. With the theory and science of war the man in the ranks has nothing whatever to do, and if the officer confines himself to what is essential for the soldier's efficiency it will be found that there is little or no necessity for formal barrack-room lectures. When the barrack-room is resorted to the lecture should take the form of conversation; be divested of its present formality and allowed to take the form of a pleasant chat about the few things the men really require to know. They should be encouraged to think and express their views on training without restraint, to state what they know, and to ask any question they please; while at the same time the officer directs their thoughts, puts frequent questions to them, and really guides their ideas and

the work at all points. The spontaneousness, unconventionality and pleasantness of the method render it especially suited for employment with men who have not a surfeit of amusement or entertainment to break the monotony of their daily lives. They must not be too long and above everything else they must be interesting. It is chiefly the dry nature of the food usually offered to the men in the lecture rooms that makes it so hard for them to digest.

Before he can hope to give his conversations on training that freshness and vitality which will cause the men to take an interest in them, and to welcome them as being something worth listening to, the officer must be well-read with an ample knowledge of the subjects embraced in the military training curriculum. If he hopes to be successful he must be a permanent student of tactics and the campaigns of modern If he is as well acquainted with military history as he should be, he will find no difficulty in giving a practical illustration or a chatty anecdote from actual war to impress the men with the importance of the subject and of course to arouse their interest in the work. to my brother company and squadron officers, with regard to the sections of history they should read, is to study the campaigns of our own Army from its earliest days to the present time. Take the question of outposts for example. An officer should keep a note book and record a few incidents bearing on outpost work and examples of its careful performance or otherwise by our own regiments. Let the men see and understand how, from a sentry going to sleep on his post a regiment has been cut to pieces; how sentries who have not kept concealed have thrown away the trump card in their colonel's hand; how confusion arises when outposts are attacked at night unless each individual soldier knows what he has to do and how to do it, etc., etc. If one of these points is impressed on the men at a lesson, backed up by one or two chatty examples from the records of our own regiments, and if one or two such lessons are held monthly the officers will

be less bored, the soldiers more pleased and they will certainly learn more than with the present daily or bi-weekly lectures. Remember that the soldier does not want to know Iomini or Clausewitz; he is much more interested in knowing how the man in the ranks performed, how he marched, fought, rationed himself, and carried out his duties generally. He rather likes to hear what history, as a rule, is too dignified to relate, namely, the doings of the men in khaki, with water-bottle on shoulder and dry biscuit in their pockets—of the stragglers who limp, sore-footed in the rear of the battalion--of how our men died at Alicante and how 3,000 gallant Britishers in the ranks hurled back 40,000 Russians from the heights of Inkerman; how the outposts were caught napping here and how the patrol did its work carelessly there. But to do this the officer must be well Fortesque's History of the British Army is splendid work and should be found in every regimental library in the Army. A page of it does me more good than a volume of Sedan, Mars-la-Tour, Gravelotte, etc. is too expensive for individual officers to maintain there are the regimental records which, if carefully used, will afford material wherewith nearly every tactical operation the soldier requires to know can be illustrated. I would like to see the regimental records of valour, devotion, and duty faithfully performed used a hundred times more extensively than they are at present. There is no reason why a neatly bound edition should not be printed regimentally, kept in stock, and presented yearly to twenty per cent. of the most efficient men "with the best wishes of the colonel and officers," I feel confident that the men would read it with interest and cherish it as a lasting memento of the distinguished regiment they served in and as a record of the esteem in which they were held by their officers.

## CHAPTER XV.

Of all the difficult problems that the conditions of modern war present, perhaps one of the most difficult is the provision of an adequate supply of ammunition for a prolonged battle, and its transport in the theatre of war. The magazine rifle, which has rendered possible an appalling shower of lead, has also brought in its train the possibility, and in fact the probability, of our men suddenly finding themselves without ammunition just at the moment when it may be most urgently required. It was at times forcibly brought home to us in South Africa that men who are thrown into a fight in the early morning may often find themselves still hanging on to advanced positions in the attack, or important points of the defence, in the evening. And when we remember that with the magazine rifle the 100 rounds carried on the soldier even with aimed and deliberate fire may easily be exhausted in an hour, the supreme importance of improvising means for its replenishment will be apparent. On the defensive when ample time for preliminary preparation is available it is of course possible to pile up such a supply of ammunition as to permit of the soldier firing away to his heart's The Turks on the defensive at Pleyna on the rath and 12th September, 1877, fired away an average of 300 rounds per man in repelling the Russian attacks. In fact in Buglurbashi they expended an average of 500 rounds per man in six But they were on the defensive and they hours' fighting. adopted the method which at present finds favour with French Artillerists in the utilisation of the fire of their quick-firing field gun, viz., to cover certain areas of ground over which the enemy is passing with a continuous shower of lead. I said before, is possible on the defensive when ample time is available for disposing the men and placing supplies of ammunition in convenient and handy positions. In the fights mentioned above the Turks had an immense central stock of ammunition, housed in a mosque which was replenished from Plevna at regular intervals; each redoubt had its own reserve of ammunition, and each trench its numerous boxes.

So we see that provided the ammunition is available in sufficient quantities the men on the defensive can expend almost unlimited quantities. Whether it is right or even sound in principle to allow them, under such circumstances to blaze away without control is very doubtful but its discussion here would be irrelevant. With reference to this particular point, however, I would invite attention to the action of the French soldiers in a defensive position at St. Privat which formed the French right at the battle of Gravelotte on August 18th, 1870. Here, although they had practically annihilated the German Guard which lost about 4,500 men in half an hour, the French expended so much ammunition and had such poor arrangements for replenishing it, that when the Saxons, who came up to reinforce the Germans, advanced, they were forced to evacuate their position partly through want of ammunition. I would also remind the reader of the disastrous fight at Isandlwhana in Zululand where our men having expended their ammunition were rushed and overwhelmed by the Zulus. "But the dire crisis was at hand," writes Mr. Stein in the Battles of the Nineteenth Century. "The widespread horns of the Zulu army had worked their way round the flanks, and were even now showing themselves in rear of the English The native contingent had always been a broken reed upon which to lean, and it now broke and fled in the utmost disorder, thus laying open the right and rear of the 24th. ammunition began to fail, and the Zulu opportunity had come. Nor were their chiefs slow to note and profit by it. Hitherto the attack had been made in the silence of perfect discipline. Now, as the iron-hearted warriors recovered from the momentary check, they raised the ominous Zulu war-shout, and dashed forward in a last irresistible charge. They poured through the

fatal gap in the line of defence, and in a moment the English soldiers were lost in the midst of the seething savage crowd." So I say that, whether on the defensive or in the attack, our men must never for a single moment forget the great importance of husbanding their ammunition. During the campaign in South Africa every time I began a fight, whether on the defensive or in the attack, the firing had no sooner begun than I sent word to each troop commander to slow down immediately his men were reduced to fifty rounds each. I repeated the messages either by orderlies or by signallers every hour. permitted of my maintaining at least a certain control over the expenditure of ammunition. The result was that never once throughout the war were my men short of ammunition and on one occasion, at a distance of thirty miles from the main column, I was able to maintain a defensive fight from 7 a.m. My men carried on the person 150 rounds per man, and I had the advantage over most regiments, in that I carried a bandolier of ammunition round each horse's neck, as stated in my "Cavalry Tactics." This often gave me a further reserve of 10,000 rounds handy, and ready at the sol-As is probably known this method of carrying ammunition with mounted troops has now been adopted for our cavalry, both British and Native, and the soundness of the measure from a purely practical point of view is to my mind unquestionable.

If we now turn our attention to the attack we find ourselves confronted, as I said before, with one of the most difficult problems of the modern battle field. As long as sufficient transport is available and the mobility of our forces is not appreciably lessened, there is, of course, no limit to the amount of ammunition that can be carried in the field, but it is when we come to face the difficulties of a prolonged attack that we find the question of supplying the men with ammunition is not so casily solved. Nor do I profess to be able to solve it, but I think that every junior officer and non-commissioned officer in the army should clearly understand and appreciate the import-

ance of the subject so that they can co-operate with their seniors and impress on their men the urgent and constant necessity of never allowing its importance to be overlooked or lost sight of. I am afraid that when many of our regiments went to South Africa the officers and non-commissioned officers had not been sufficiently impressed as to the risks they would run and the dangerous plights they would often find themselves in if they allowed their men to shoot away all their ammunition in the earlier stages of the attack. Dozens of times they lay out on the sun-baked veldt for hours under a scorching sun, and able only to fire a few shots now and again at the enemy on the ridges in front of them. Under such circumstances what would have been the result had the Boers suddenly developed a well conducted counter attack such as Longstreet did with his Confederates at the second battle of Bull Run? Our men. short of ammunition, would have been swept out of existence.

It was not until several months of hard fighting and many reverses that they began to take more care of their ammunition. I do not blame them because it was not their fault that they had not been, morning, noon, and night impressed with the urgent necessity of maintaining control over their ammunition. Their regimental and brigade commanders must answer for their lack of knowledge. They cannot excuse themselves on the grounds that they had no reliable or authentic data to go upon. In the fighting near Valparaiso fourteen years ago, and only eight years before Kruger's ultimatum was delivered, it was clearly demonstrated that unless sound methods of fire discipline and control are inculcated, the men in the firing line may find themselves without ammunition in a very few minutes. This was the first fight in which magazine rifles were used on a large scale, and, was surmised by those who thought at all about these things, the expenditure of ammunition in a short time was The men had only been in training for six weeks and it is just possible that amongst the other multifarious duties they had to perform and lessons to learn, the necessity for

carefully husbanding the ammunition was overlooked; and it nearly resulted in the loss of the campaign. Mr. Atteridge. in his "Fight for Valparaiso," says: "There was now a sharp infantry fight in progress at two points-on the Constitutionalists' right, where the 1st Brigade was steadily forcing back the Balmacedists along the ridge, and between Colemo and Concon Medio, where Canto with the 2nd Brigade was struggling for the possession of the long green hill-side above At both points the rapid fire of the new rifle told strongly in favour of the attack; but it had also its dangers and its drawbacks, for the regiments first engaged, partly trained as they were, did not husband their cartridges, and though they had 150 each to begin with, they were soon beginning to run short of ammunition. This was especially the case on the right. The Iquique regiment had got to within two hundred yards of the enemy's battery, and the gunners were firing case shot. The guns were in imminent danger, when the ammunition of the attackers failed and their fire died away. In the attack of the 2nd Brigade cartridges had run so short that the men searched the bodies of the dead and wounded for further supplies. Here it would have gone badly with the attack had not part of the 3rd Brigade arrived, tired after their night march but with their pouches well filled with cartridges. The Balmacedists had been gathering round Concon Medio for a counter attack, when in their front the sudden outburst of heavy volley firing from the newly arrived battalions, and on the left the sight of their own troops retiring in confusion followed by Korner's 1st Brigade, told them that the battle was lost." The campaign in Bulgaria in 1877 was replete with examples of how dangerous it is to allow the men to fire away at random.

The fact of the matter is that whilst we talked and lectured here and there on musketry training and the best ways of controlling the men on the barrack square, the actual instruction imparted partook of the nature of "eye wash" rather than practical efficiency, and like the tactical

training for years at garrison classes, and the musketry training at musketry schools, its sole aim and object was to obtain good inspection or examination results. The raison d'etre of fire control and discipline was either not understood or was neglected, and provided the men could fire and cease fire by word of command or by whistle signal nothing further was attempted, and the men themselves were left to learn on many a hard fought field, what their officers had never taught them in peace, that their own lives as well as the destruction of the enemy depend on their having their bandoliers full at decisive ranges.

With a view to meeting the extraordinary expenditure of ammunition which, even with a single army corps of 30,000 or 40,000 men, may amount to hundreds of thousands of rounds per day, let us turn to section 175 of the Infantry Training and see what provision is made by the regulations. Of course these rules apply to the Home Army with which we are directed to be acquainted.

The whole organisation for the transport and supply of ammunition with an army in the field is divided into:

- (a) Service Ammunition.
- (b) Regimental Reserve.
- (c) Brigade Reserve
- (d) Divisional Reserve.
- (e) Ammunition Park.

I think every officer and non-commissioned officer should be thoroughly acquainted with the first three and have a general knowledge of the last two. The service ammunition is that which is in immediate possession of the men and consists of 100 rounds per rifle, carried by each soldier, together with 4,000 rounds packed on the carriage of the machine gun if it is a travelling carriage, and 3,500 rounds carried by two mules if the machine gun is provided with the tripod equipment. This latter amount of course is meant for the machine gun and in no way affects the amount of service ammunition carried by the men, which is, as I have already explained, 100 rounds per

rifle. Now let us turn to the regimental reserve ammunition, and we find that each battalion is provided with eight ammunition mules and six small arm ammunition carts. The weight of a box of ammunition is about 80 lbs. and the acknowledged load for an ordinary mule is 160 lbs. or 2 maunds, so that each mule is given the task of carrying two boxes. Out of the six small arm ammunition carts, five of them carry 16 boxes each, whilst the sixth one carries 6,600 rounds for each of the two battalion machine guns or 13,200 rounds altogether. To summarise the regimental reserve consists of—

16 boxes carried on 8 mules.

80 boxes on five small arm ammunition carts.

12 boxes of machine gun ammunition carried on one small arm ammunition cart.

Now we come to the brigade reserve. We all know that a brigade consists of four battalions. The brigade reserve of ammunition is not a separate organisation, but it is obtained by taking two small arm ammunition carts from each infantry battalion and placing them under the authority of the brigade commander. What should be clearly understood in this respect is that the brigade reserve is not a supply of ammunition apart from and in addition to the regimental reserve, but merely a part of the latter placed under the brigade commander to enable him to use it when most urgently required if his brigade is in action. When a battalion, therefore, forms part of a brigade in the field its regimental reserve immediately at the disposal of the battalion commander is 8 mule loads and four carts, one of which contains the machine gun supply, and the brigade reserve is 8 small arm ammunition carts.

Taking a battalion as 800 rifles, this gives the following:—

Carried on the soldier ... ... 100 rounds.

The state of the s	• • • •	• • • •		·	
Regimental reserve			93	,,	
Artillery Brigade, Am	muni	tion			
column				,,	
Ammunition park	•••	• • •	55	1,	
	Tot	al	. 325	., per	rifl.

Although not laid down as a part of the course at the Schools of Musketry we should know what is carried in India. In accordance with I. A. O. No. 743 of the 4th October, 1903, the following is the infantry scale laid down:—

By the soldier... ... ... 100 rounds.

In regimental reserves ... ... 80 ,, per rifle.

In regimental ammunition column ... ... ... ... ... ... ... ... ... 120 ,, ,,

Total ... 300 ,, ,,

Over and above this 200 rounds per rifle are to be carried in the Ordnance field park.

A section of an infantry ammunition column consists of 18 camels or 48 pack mules, or 9 mule or bullock carts, and it carries 82 boxes for a British infantry battalion and 77 boxes for a Native infantry battalion.

I hope from what I have said that it is quite clear what ammunition accompanies a unit in the field, and if a company or squadron commander makes a rough sketch shewing

- 1. A battalion on the march.
- 2. A battalion in action.
- 3. A brigade on the march.
- Λ brigade in action.

and shows the mules and carts as detailed above, his non-commissioned officers will have no difficulty in grasping the arrangements made for the supply of ammunition in the field. It should be noted that according to the Home regulations 275 rounds per rifle, and in accordance with the Indian regulations, 300 rounds per rifle, are available at the beginning of a fight. From the infantry training manual it will be observed that the regimental sergeant-major takes charge of the regimental reserve ammunition for a British battalion, and that an officer is detailed to take charge of the brigade reserve which, as I have already stated, is made up by detaching two small arm ammunition carts from each of the four battalions of a brigade. If an

officer should ever happen to be detailed as brigade reserve ammunition officer his first duty, when the dispositions for the attack or defence are being made, is to establish communication with each sergeant-major in charge of the regimental reserve supply. It is laid down that he is to do so by means of signalling, but as this cannot always be relied on, especially in wet or foggy weather, he should take care to have two or three orderlies with him for the purpose.

It appears to me extremely doubtful whether the amount per rifle carried as stated above and available at the commencement of a battle is sufficient. I would prefer to see at least 400 rounds per rifle made available. The regulations lay down that whenever a serious engagement is imminent, officers commanding battalions will issue 50 rounds per rifle from the small arm ammunition carts, so that, if possible, every man shall carry 150 rounds on his person. In my opinion this is not nearly sufficient to permit of the men maintaining a prolonged Our experiences in South Africa, notably at Modder River, and the lessons of the present war in Manchuria go to confirm the conviction that it is next to impossible to supply the firing line with ammunition under the stress of a modern battle. And since this is often prolonged to several days it appears extremely important that the men when launched to the attack should be provided with as many rounds as they can possibly carry, so that the more advanced lines can maintain their positions at least for one day. The Russians and Japanese were invariably provided with 300 rounds per man, carried on the person, which was issued to them immediately before they were sent forward to the attack. Under cover of the night the ammunition expended by the firing lines and supports was replenished, and at dawn the men were always in a position to maintain another prolonged fire fight. Like many other lessons of the Boer War which in our short-sighted admiration of foreign methods we are prone to overlook, the difficulties of supplying men on the field of battle under the hail of projectiles which renders it next to impossible to raise the head

when within 800 yards of a position has been intelligently interpreted by the general staff of the Japanese Army. of sending the men forward with a small supply which must be replenished within a few hours if the men are to retain their positions and their efforts be encouraged, they give then too rounds per man before starting, and rightly rely on the individual intelligence of the men, and the commonsense of their subordinate leaders to see that it is carefully and judiciously expended. An ammunition cart drawn by four mules will find itself in difficulties within a few minutes if exposed at 1,500 or 1,600 yards, and an ammunition mule if it stands still at 1,000 or 1,200 yards will afford an easy mark for the present long ranging and accurate weapon. It is only right to point out that the regulations say that if the ground is favourable the ammunition mules should be able to get within 500 yards of the firing line, and the small arm ammunition carts to within 1,000 yards of it. This is practically what I mentioned above as a result of my personal experience of modern fire and it has been fully verified by the experiences of officers who were present at Telissu, Liaoyang, and Mukden. We must not however rely too much on the ground to assist us in getting our mules and carts into close and favourable positions. requires very favourable conditions indeed to enable us to move a four-horsed cart under cover from point to point, and it is therefore better that we should under all circumstances and at all times, before launching our men to the attack, or before placing them in any position when they may have to hold on till nightfall, issue at least 300 rounds per rifle. At Magersfontein it was not till the welcome night permitted that stretchers could be sent forward to the fighting At the Modder River the Coldstreams and Grenadiers were brought to a standstill at 1,000 yards from the enemy's position, and it was only with the greatest difficulty and danger that a few, out of the many ammunition carriers who tried, could, by crawling on their stomachs, get up to the firing line. Even when a few did get there it was found impossible for

the men to run along the line and distribute the ammunition. The men lying down had to throw packets to those on their right and left who, in their turn, threw them on to others. Of course, as is well known, the ground was flat, open, and quite untayourable, and the difficulty of keeping up the ammunition supply was as great as it was unexpected. But let me again remind the reader that the Japanese and the Russians, who were fighting in a rugged and hilly country intersected with rivers and ravines, did not rely on any artificial methods for keeping their men supplied with cartridges. The ground on every battle field was distinctly favourable for the concealed movement of carts and mules, and they did not in this particular respect leave anything to chance, but on each occasion began their prolonged battles with as much ammunition in the firing line as the men could carry. The following is an abstract from the official reports of one of our attaches at the front:

"The idea of sending up ammunition to the troops by carriers did not work. The difficulty was got over by making each man carry 300 rounds on his person. This sufficed."

Officers commanding battalions are held responsible that, when ammunition is expended, pouches are refilled with the least possible delay. This looks well on paper, but it appears to me that it will be the most difficult thing to do on the battle-field. We have first to answer the following questions:—-

- (1) Can the regimental reserve of two pack animals and 4 small arm ammunition carts accompany the battalion in the attack?
- (2) Can the ammunition carriers move between the firing line and the pack mules or carts?

My experience is, that it is impossible to remain mounted within 1,500 yards of an enemy in position. Occasionally one has to mount to have a look at what is going on beyond the flanks. It is only by keeping constantly on the move, however, and then at right angles to the enemy's fire, that one can hope to move safely through the shower of bullets that fills the air.

What chance then have the four ammunition carts, each drawn by four or six mules, and the pack mules, moving slowly towards the enemy, halting and standing about whenever the line halts? Even assuming we get the pack mules and the ammunition carts to within 1,500 yards, how is the attack to be supplied when the advanced lines are 500 or 600 yards from the enemy? If the attempt is made to bring the carts and mules closer up (and undoubtedly the attempt would be made) one or two of the mules will certainly be knocked over. Will the ammunition carriers now be able to move over the fireswept zone of 700 or 800 yards, or how many will survive it? Probably those infantry officers who fought with their battalions, especially in Natal, can answer these questions.

If the ammunition carriers must be retained. I think we could lessen their dangers and difficulties somewhat by doing away with the canvas ammunition bag, and giving them a better means of carrying their load. The present ammunition bag. like the haversack when full, is a clumsy affair to carry, especially when men have to surmount obstacles, move down slopes, or climb ridges. It gets from the back round the man's side and usually winds up by dangling in front of him. to see a man sometimes nearly worn out, trying to climb a hill with an ammunition bag or haversack dangling under his stomach. Attempts to creep from rock to rock are ludicrous. I would suggest an arrangement to be strapped on to the back something like the valise equipment. Except for the extra, weight imposed, the man would not be otherwise inconvenienced, and would be quite free to work his way up to the firing line with his precious burden.

This, the difficulty of keeping the advanced lines supplied with ammunition, is one of the lessons learned at the enormous cost and at the great sacrifices during the conflict against the Republican soldier in South Africa, and it is one that should be constantly borne in mind, impressed on the rank and file and inculcated by officers at every field day, at every field firing, and constantly during the company training, so that when next

we are called upon to enter the stern arena of war and to uphold the honour of Imperial Britain, we shall not again be found wanting. The best laid plans, the most unflinching courage, the sternest resolves to conquer, will suddenly end in dismay, discouragement, and failure, in loss of morale and in want of confidence if the men, as they did so many times in South Africa, suddenly find themselves without the means of replying to the enemy's fire.

